Building Industry Association of Southern California, Inc.

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Submitted Via Email to: seconddraftVCMS4@waterboards.ca.gov

Original sent by Overnight Mail

Dr. Xavier Swamikannu 320 W. Fourth Street Suite 200 Los Angeles, California 90013

Re: Comments from Construction Industry Representatives Concerning the Draft NPDES Permit No. CAS004002 – Ventura MS4.

Dear Dr. Swamikannu:

This letter pertains to the draft, proposed Waste Discharge Requirements for Municipal Storm Water Discharges within the Ventura County Watershed Protection District, County of Ventura and the Incorporated Cities Therein (hereinafter, the "2d Draft Permit"), released pursuant to Public Notice No. 07-048 of the State of California, Los Angeles Regional Water Quality Control Board (the "Board"). The comments herein are those of the following entities, each of which represents the homebuilding industry or related construction and land development industries within the Southern California region that includes Ventura County. Specifically, the comments are from:

- Building Industry Association of Southern California, Inc. ("BIA/SC");
- The Greater Los Angeles/Ventura Chapter of BIA/SC ("GLAV"); and
- Building Industry Legal Defense Foundation ("BILD").

BIA/SC is a nonprofit trade association representing more than 2,300 member companies, which together have more than 200,000 employees. The mission of BIA/SC is to promote and protect the building industry to ensure its members' success in providing homes for all Southern Californians.

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GLAV, a Chapter of BIA/SC, represents approximately 500 member companies involved in every aspect of building and providing homes in Ventura County and most of Los Angeles County. GLAV exists to provide leadership on public policy issues that promote building quality communities for the region's growing population, to increase the public appreciation of the importance of housing and those who provide it, and to facilitate improved business opportunities for its members. GLAV is committed to increasing homeownership opportunities for the current and future residents of our region. To reach this goal, GLAV works alongside elected officials, regulators, community leaders and organizations to come up with credible solutions to the housing crisis.

BILD is a non-profit mutual benefit corporation and wholly-controlled affiliate of BIA/SC. BILD's purposes are to monitor legal developments and to improve the business climate for the construction industry in Southern California. BILD's mission is to defend the appropriate legal rights of current and prospective homeowners and property owners. To accomplish this mission, BILD participates in and supports litigation and regulatory participation necessary for the protection of such rights. BILD promotes and supports important legal cases to secure favorable court decisions for private property owners and developers. BILD focuses particularly on litigation and regulatory matters with a regional or statewide significance to its mission.

BIA/SC, GLAV, and BILD are grateful that the Board and its staff have provided opportunities for exchanges of views prior to the eventual promulgation of new MS4 permit that will apply within Ventura County. In particular, we are grateful that the Board's staff has met with Dr. Mark Grey, who serves as both BIA/SC's Director of Environmental Affairs and the Construction Industry Coalition for Water Quality's Technical Director. Those discussions have led to some appreciable improvements in the proposals that are reflected in the 2d Draft Permit in comparison to the initial draft. We hope that such exchanges will continue, and will result in the removal and correction of remaining less reasonable regulatory proposals still reflected in the 2d Draft Permit.

In addition, we appreciate the complex legal and technical backdrop against which the Board and staff must fulfill their duties, as well as the Board's and staff's highly commendable intentions concerning environmental quality. Given the many complexities, the Board's burden is substantial. To the extent that any of our comments seem blunt or harshly critical, please remember that we respect the challenges faced by the Board and staff.

That said, BIA/SC, GLAV and BILD continue to strongly oppose from a legal and policy perspective many of the proposals that remain in the 2d Draft Permit. In this letter, we will explain both our opposition to the many of the specific proposals that we find unacceptable and our recommended corrections and improvements.

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Before addressing specific issues, however, we will set forth our opinion that the 2d Draft Permit misstates and deviates from applicable law. In particular, we will address many of the 2d Draft Permit's prefatory "findings" concerning the legal backdrop, history of the Board's water quality regulations, and the application and interplay of controlling federal and state law. As long as the Board and its legal counsel refuse to address erroneous assumptions about the controlling law and the discretion that the Board enjoys, the Board will continue to wield its powers unreasonably.

I. The Board's periodic review and revision of "MEP" standards constitute an exercise of broad discretion, which is bounded by reason, law, and specifically the six mandatory Porter-Cologne Act "balancing factors" (California Water Code § 13241).

The 2d Draft Permit's prefatory findings include numerous mistaken statements about the Board's legal powers and authority. Taken together, such findings imply that the Board has little or no discretion to balance the abilities and resources of municipal separate storm sewer system (MS4) permittees against the goal of improving water quality. Among other slanted suggestions, the findings imply that the Board has no choice other than to:

- strictly control storm water discharges from MS4s to the maximum extent possible -- rather than practicable;
- uncritically and immediately implement TMDLs that were approved by the U.S. Environmental Protection Agency ("EPA") pursuant to a certain consent decree; and
- simply ignore the Porter-Cologne Act "balancing factors" when establishing the waste discharge requirements.

For example, at page 12 (Finding D-10), the 2d Draft Permit erroneously states that the imposition of the 2d Draft Permit's requirements would not constitute an unfunded state mandate on local government. Within that text, the following statements are included:

"This Order implements federally-mandated requirements under [Clean Water Act section 402(p)(3)(B)]. This includes federal requirements ... to reduce the discharge of pollutants to the maximum extent practicable, and to determine such other provisions as the [EPA] Administrator of the State determines to be appropriate for the control of such pollutants. * * * The authority exercised under this Order is not reserved state authority under the Clean Water Act's savings clause ..., but instead is part of a federal mandate to develop pollution reduction requirements for [MS4s]. To this extent, it is entirely federal authority that forms the legal basis to establish the permit conditions."

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2d Draft Permit, Finding D-10, page 12.1

Findings such as the one above could leave any reader with false impressions about the Board's powers, its statutory obligations, and the breadth and bounds of the latitude that it enjoys. As we explain below, the Board is a state agency, tasked under its state enabling legislation (the Porter-Cologne Act) with an obligation to exercise its discretion pursuant thereto. Nothing about the relevant federal law negates that obligation. In fact, federal law relies upon the Board's compliance with the Porter-Cologne Act in authorizing the Board to act as the regulation implementing the federal NPDES regulatory and permitting program.

A. Under federal law, the "maximum extent <u>practicable</u>" ("MEP") standard is <u>not</u> synonymous with the "maximum extent <u>possible</u>." Instead, under federal law, the Board's establishment of MEP standards is a balancing exercise of broad discretion.

Whenever the Board establishes MEP standards for MS4 operators through revised permit conditions in accordance with federal law, the Board is exercising broad discretion. See Arkansas v. Oklahoma, 503 U.S. 91, 105 (1992) ("Congress has vested in the Administrator [EPA – or, as here, a surrogate state agency] broad discretion to establish conditions for NPDES permits."); Defenders of Wildlife v. Browner, 191 F.3d 1159, 1166-67 (9th Cir. 1999) ("Under [the MEP standard set forth in Clear Water Act section 402(p)(3)(B)(iii)], the EPA's choice to include ... limitations in [NPDES] permits [for MS4s] was within its discretion."); City of Abilene v. U.S. E.P.A, 325 F.3d 657, 660 (5th Cir. 2003) ("The plain language of [CWA section 402(p)] clearly confers broad discretion on the EPA [or, as here, a surrogate state agency] to impose pollution control requirements when issuing NPDES permits.").

Further, contrary to various suggestions from the environmental community, the MEP standard should not be interpreted as requiring the reduction of discharges to "the maximum extent **possible**." As one court recently explained:

"[The environmentalist plaintiffs] essentially call for an interpretation of the statute that equates 'practicability' with 'possibility,' requiring [the agency] to implement virtually any measure ... so long as it is feasible. Although the distinction between the two may sometimes be fine, there is indeed a distinction. The closer one gets to the [environmentalists'] interpretation, the less weighing and <u>balancing</u> is permitted. We think by using the term 'practicable' Congress intended rather to allow for the application of agency expertise and discretion in determining how best to manage ... resources."

¹ In this letter, we have added all emphasis (e.g., bold type) that is indicated within the authorities and 2d Draft Permit provisions quoted herein, unless otherwise specifically indicated.

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Conservation Law Foundation v. Evans, 360 F.3d 21, 28 (1st Cir. 2004).

The federal statutes and regulations under which the Board establishes MEP requirements in MS4 permits do not function as a uncritical regulatory torque-wrench such that the Board must "ratchet down" on the regulated community as much as possible, regardless of how crippling theimposed standards become for regulated MS4 operators and stakeholders. As a key example, the Board's discretion exercised as EPA's authorized surrogate in implementing the MS4 permit program is so broad that the Board is not required to insist upon strict numeric compliance with the relevant water quality standards and objectives. Defenders of Wildlife v. Browner, 191 F.3d at 1165 ("When we read the two related sections together, we conclude that [Section 402(p)(3)(B)(iii) - i.e., the MEP standard] does not require municipal storm-sewer discharges to comply strictly with [Section 301 - i.e., effluent limits].") Instead, the Board is free to re-determine and re-establish, through successive MS4 permit cycles, what it deems the "maximum extent practicable," following a thoughtful balancing of relevant factors. Almost universally throughout the nation, the preferred approach has been and remains the iterative "best management practices" approach - which is the most flexible and progressive approach for storm water quality control.

B. Because the EPA determined in 1973 that the implementation of California's Porter-Cologne Act is sufficient to meet the aims of the federal Clean Water Act, the Board is now the principal decision-maker concerning the waste discharge requirements within Los Angeles region.

The 2d Draft Permit's prefatory findings section is laced with many suggestions that the Board is "under the federal thumb," and therefore unable to exercise broad discretion. The suggestions are false and misleading. Rather, under the state-and-federal partnership established by Congress in the federal Clean Water Act, the Board enjoys the principal decision-making powers to regulate water quality within the Los Angeles region.

To appreciate the degree to which the Board has ability to act pursuant to state law when issuing MS4 permits, one must have an understanding of the history of water quality regulation. The federal interest in the nation's overall water quality was spurred in June 1969, when the Cuyahoga River (near Cleveland, Ohio) literally caught fire and burned. This televised, national embarrassment led to extensive congressional debate, which ultimately culminated in the landmark Federal Water Pollution Control Act Amendments of 1972, later amended and known as the "Clean Water Act."

The Clean Water Act established the National Pollution Discharge Elimination System, or NPDES, which is a system of requiring a regulatory permit for most discharges of pollutants to the nation's waters. Congress charged EPA with initially administering NPDES throughout the nation. However, as enacted in 1972, the federal

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statutes included a mechanism for any state to assume the primary responsibility of administering the NPDES program within its boundaries.

Specifically, Congress took care to "recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution." 33 U.S.C. § 1251(b). Under the Clean Water Act, the states were entitled to qualify for – and, upon such qualification, to assume – the primary responsibility for the implementation and enforcement of NPDES. 33 U.S.C. §§ 1342(b) and 1370. In 1978, the U.S. Ninth Circuit Court of Appeals opined on the division of powers between EPA and the California water boards, and described the legal relationship as follows:

"Thus, although the 1972 amendments gave the EPA the authority in the first instance to issue NPDES permits (33 U.S.C. § 1342(a)(1)), Congress clearly intended that the states would eventually assume the major role in the operation of the NPDES program.

Under § 1342(b), a state may submit to the EPA a proposed permit program governing discharges into navigable waters within its borders. If the state can demonstrate that it will apply the effluent limitations and the amendments' other requirements in the permits it grants and that it will monitor and enforce the terms of those permits, then, unless the Administrator of the EPA determines that a state program does not meet these requirements, he must approve the proposal (§ 1342(b)).... Upon approval of a state program, the EPA must suspend its own issuance of permits covering those navigable waters subject to the approved state program (§ 1342(c)). However, while the direct federal regulatory role largely ceases following EPA approval of a state program, the EPA does retain a review authority over the states. The EPA may veto particular [individual] permits issued by the state (§ 1342(d)) if it finds that federal requirements have not been met, or it may withdraw approval of the entire state program upon a determination, after notice and an opportunity to respond, that the [overall] program is not being administered in compliance with the mandates of federal law (§ 1342(c)). Despite this residual federal supervisory responsibility, the federal-state relationship established under 33 U.S.C. § 1342 is 'a system for the mandatory approval of a conforming State program and the consequent suspension of the federal program (which) creates a separate and independent State authority to administer the NPDES pollution controls.' Mianus River Preservation Committee v. Administrator, EPA (2d Cir. 1976) 541 F.2d 899, 905.

California has adopted a plan for the issuance of NPDES permits ([the Porter-Cologne Act]) which has been approved by the EPA. 39 Fed.Reg. 26,061 (1973). The California State Water Resources Control Board ('State Board') and its nine subsidiary regional boards thus have

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<u>primary responsibility</u> for the enforcement of the [Clean Water Act]... in California."

Shell Oil Co. v. Train, 585 F.2d 408, 410 (9th Cir. 1978).

In apparent recognition of the relatively progressive and trend-setting nature of California's Porter-Cologne Act (which preceded the 1972 federal legislation), California was the first state that EPA authorized to implement NPDES within its boundaries. Following such authorization, EPA: (a) reviews the permits issued by the state under the state's enabling law, (b) may veto inadequate permits (i.e., a relatively passive and reactive role), and (c) may revoke entirely the overall state implementing authority if it concludes that the state is generally implementing the NPDES program inadequately. See 33 U.S.C. § 1342(d); 40 C.F.R. § 123.44; Save the Bay, Inc. v. U.S. E.P.A., 556 F.2d 1282, 1285-87 (5th Cir. 1977).

In light of this legislative history and countless confirming judicial authorities, the Board should recognize that it has the primary responsibility for the NPDES program within the Los Angeles region, and enjoys broad discretion about how to implement that program. Moreover, the Board should better recognize that the primacy of its role is ongoing and continually renews itself. In other words, the Board is never constrained for long by any federal yoke, presumptive or otherwise. Under the Clean Water Act, the Board has the authority and the statutory responsibility to reconsider and – whenever the evidence before warrants it – revise its regulatory regime, including the water quality objectives and standards that are reflected in the basin plan. See 33 U.S.C. § 1313(c)(1) (the federally-prescribed triennial review process).

Because the Board's authority and responsibility is primary and ongoing, the Board should reject the 2d Draft Permit's suggestion that the Board is inextricably bound to impose MS4 permit conditions that will result in the immediate enforcement of, for example, various federally-approved "total maximum daily loads" ("TMDLs") and waste loud allocations ("WLAs"), without reference to or incorporation of implementation measures or compliance time schedules. The TMDLs are themselves merely the upshot of regulatory findings that water bodies are "impaired," meaning they are not meeting their Board-designated "objectives" and/or "standards," which this Board has the power and, upon sufficient evidence, obligation to revise pursuant to the triennial review process. Moreover, as the California appellate court recently recognized in connection with the trash TMDL, the Board retains the discretion at the permitting stage to reject the imposition of numeric effluent limits that embody TMDLs, WLAs or other numeric water quality objectives:

"[T]here may be other approaches [i.e., alternatives to implementing a TMDL] that would be appropriate in particular [permitting] situations. When EPA [or its authorized state surrogate] makes a TMDL or permitting decision, it will make each decision on a case-by-case basis and will be guided by applicable requirements of the [Clean Water Act]

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and implementing regulations, taking into account comments and information presented at that time by interested persons regarding the appropriateness of applying these recommendations to the particular situation."

City of Arcadia v. State Water Resources Control Bd., 135 Cal.App.4th 1392, 1429-30 (2006), (quoting a non-binding, November 2002 EPA draft memorandum that explains the discretion that EPA and its state surrogates retain to fashion permit conditions that deviate from TMDLs and waste load allocations).

Two other aspects of the 2d Draft Permit's prefatory findings are remarkable on this point. First, Finding No. D-9 (2d Draft Permit, page 12) flatly misconstrues the law, stating: "Where a TMDL has been approved, NPDES permits must contain effluent limits and conditions consistent with the assumptions and requirements of the available [waste loads allocations] in TMDLs." While the general federal regulation adopted under Section 301 (33 U.S.C. § 1311) is cited for that proposition, 40 CFR § 122.44(d)(1)(vii)(B), the federal statutory provisions governing MS4 permits exempt MS4 permits from strict compliance with that general regulation. *Defenders of Wildlife v Browner*, 191 F.3d at 1165. Specifically, 40 CFR §§ 122.44(k)(2) and 122.45(a) expressly permit the Board to rely upon "best management practices" instead of numeric effluent limitations when regulating MS4 operations.

Second, even the 2d Draft Permit itself faintly indicates that the Board has the broad discretion to impose waste discharge requirements that do <u>not</u> strictly meet the currently established TMDLs at all times. Specifically, Finding D-7 (2d Draft Permit, page 11) cites the same, non-binding November 2002 draft EPA guidance for the proposition that "[a]ny increase in loading of a pollutant to a water body that is impaired because of a pollutant would presumably degrade water quality in violation of applicable anti-degradation policy." However, Finding D-22 (2d Draft Permit, page 17-18) then undercuts the same presumption. The latter states that "[b]oth state and federal anti-degradation policies acknowledge that an activity that results in minor water quality lowering, even if incrementally small, can result in violation of Antidegradation Policies through cumulative effects, for example, when the waste is a cumulative, persistent, or bioaccumulative pollutant." Implicit in the statement is recognition of the fact that ephemeral or occasional lowering of water quality would not violate anti-degradation policies, where the waste is not particularly cumulative, persistent, or bioaccumulative.

Here, the MS4 operators are dealing with storm water, which is characterized by pollutant loads and concentrations, including sediment loads and concentrations, that are naturally-occurring, naturally wildly variable, and naturally transient. Further, on rare occasions, a massive storm will come along which is so unusually large as to cause a "reset" event – an event whereby the water courses are substantially altered by the tremendous forces of raging storm water – in alluvial drainage systems like those of Ventura County. Given this context, the anti-degradation policy is not violated by

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occasional, relatively minor deviations from (for example) TMDL waste load allocations applicable to storm water.²

C. Federal law does not negate the Board's statutory obligation to apply and reconcile the six Porter Cologne Act "balancing factors" (Water Code section 13241) when revising MS4 waste discharge requirements.

The 2d Draft Permit reflects no effort whatsoever by the Board's staff to marshal evidence necessary to apply and reconcile the six balancing factors that are specifically prescribed by California Water Code § 13241. Instead, the 2d Draft Permit's prefatory findings state that the Board's "authority exercised under this Order is not reserved state authority..., but instead[] is part of a federal mandate to develop pollution reduction requirements..." 2d Draft Permit, page 12, Finding D-10. This statement fails to grasp (1) the California Supreme Court's opinion in *City of Burbank v. State Water Quality Control Bd.*, 35 Cal.4th 613 (2005); (2) the law concerning federal preemption generally; and (3) the implications of the breadth and bounds -- and attendant responsibilities -- of the Board's discretion in adopting MS4 permits.

As noted, California's trend-setting Porter-Cologne Act predated the 1972 federal legislation known as the Clean Water Act by several years. Perhaps because EPA easily recognized the Porter-Cologne Act's elegance, California became the first state to be authorized to implement the NPDES program.

Importantly, nearly all of the Porter-Cologne Act's provisions are relatively "structural" and "procedural," in that they:

- establish the State Water Resources Control Board and the nine regional water quality control boards;
- define how they should be constituted;
- define the water boards' respective jurisdictions;

The anti-degradation policies operate to prevent the relaxation of water quality standards that are being met. They would not apply to a situation where (i) it can be shown that a water body's objectives and standards were established uncritically in the first instance, and (ii) natural forces routinely result in "exceedences." In that circumstance, the water body's objectives and standards and their derivative TMDLs should, of course, be revised to conform to the natural forces – without offending anti-degradation policies.

³ At the Board's September 20, 2007 public workshop concerning the 2d Draft Permit, Dr. Swamikannu stated that no formal collection of evidence consideration, or balancing of proposed MS4 permit requirements was undertaken by staff in connection with the proposed 2d Draft Permit conditions, but that the proposals reflected some "implied" balancing.

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- set forth their roles and the interplay among them; and
- set forth judicial standards of review, etc.

However, the Porter-Cologne Act also contains two – and virtually only two – Articles of Porter-Cologne Chapter 4 providing substantive direction wherein the California Legislature thoughtfully circumscribed the regional boards' discretion and intended to influence eventual water quality regulations. The Legislature's substantive direction in Chapter 4 Articles 2 and 3 boils down to a list of balancing factors that the water boards must apply and reconcile when establishing and revising water quality objectives and/or waste discharge requirements. The balancing factors are set forth in Water Code § 13241, these factors are applicable to waste discharge requirements proposed here pursuant to Water Code § 13263.

Under §§ 13241 and 13263, the Board must balance and reconcile six factors when establishing or revising waste discharge requirements for MS4 operators. The six § 13241 factors are:

- (a) Past, present, and probable future beneficial uses of water.
- (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
- (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
- (d) Economic considerations.
- (e) The need for developing housing within the region.
- (f) The need to develop and use recycled water.

The 2d Draft Permit's Finding D-10 (page 12) wrongly implies that the § 13241 balancing factors should not apply to the Board's pending action here because of the California Supreme Court's holding in *Burbank v. State Water Resources Control Bd.*, 35 Cal.4th 613. The 2d Draft Permit is therefore apparently based on a misreading or misaprehension of the *Burbank* opinion.

The *Burbank* opinion discussed three scenarios concerning the interplay between federal and state water quality regulation and the applicability (or not) of the § 13241 balancing requirement to the establishment of waste discharge requirements. To understand the three scenarios of *Burbank*, one must first assume that the federal government has legitimately prescribed a certain minimum legal requirement that water boards are mandated to enforce. The California Supreme Court remanded the case for further ascertainment concerning this key assumption. *Burbank*, 35 Cal. 4th at 627. Per

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the *Burbank* opinion, in any situation where such a *mandatory* federal minimum requirement is prescribed:

- 1. First, the State **may not relax** the federally-prescribed minimum requirement. The U.S. Constitution's "Supremacy Clause" operates to prevent the State from relaxing such a federal minimum requirement. *Burbank*, 35 Cal.4th at 626-627.
- 2. Second, if the State **merely meets** the federally-prescribed minimum requirement but does not exceed it, then the State agency is not required to undertake the balancing and reconciliation required under Water Code § 13241, because the failure to balance under Porter-Cologne is of no moment. In other words, because the State agency is doing no more than conforming to the federally-prescribed, mandatory minimum requirement, the State agency is itself imposing no waste discharge requirement upon the regulated community. In such a scenario, the State agency need not justify its decision to the imposed-upon regulated community by balancing and reconciling the § 13241 factors. *Id.* at 627.
- 3. Third, however, whenever the State agency imposes any waste discharge requirement that **goes beyond mere conformity** to a federally-prescribed minimum requirement, then the agency must apply and reconcile the § 13241 balancing factors, in accordance with the Porter-Cologne Act. *Id.* at 627-628.

The 2d Draft Permit does not recognize that the MS4 permit conditions and waste discharge requirements proposed in the 2d Draft Permit are not the result of mere conformity to any federally-prescribed, mandatory minimum requirements. Instead, if adopted, the waste discharge requirements would spring from the Board's exercise of its broad *discretion* to establish permit conditions that control pollutants to the MEP, which it plainly enjoys pursuant to federal law (as explained above).

The 2d Draft Permit is chock full of proposed waste discharge requirements that are not mandated by federal law, but would instead be – if adopted – the result of an acts of discretion on the Board's part. For example:

- Federal law does <u>not</u> prescribe that land development may have an effective impervious area of no more than five percent.
- Federal law does <u>not</u> prescribe that land development must incorporate flow controls to achieve an "EP = 1."
- Federal law does <u>not</u> prescribe that grading and land development must cease in anywhere during rainy seasons.
- Federal law does <u>not</u> prescribe that advanced treatment systems using chemical additives must be employed to avoid grading prohibitions.

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- Federal law does <u>not</u> prescribe that storm water must be treated to a 50 NTU turbidity standard before discharge from a construction site to avoid grading prohibitions.
- Federal law does <u>not</u> prescribe that numeric effluent limits must be applied to MS4 discharges. See Defenders of Wildlife v. Browner, 191 F.3d at 1165 ("When we read the two related sections together, we conclude that [Clean Water Act § 402 i.e., the MEP standard] does not require municipal storm-sewer discharges to comply strictly with [Clean Water Act § 301 effluent limits].").
- Federal law does <u>not</u> prescribe that TMDL's and WLAs must be enforced immediately through the pending Ventura MS4 Permit revisions, and <u>especially</u> not in advance of the implementation schedules that were heretofore adopted by the Board.
- Etc., etc., etc.

The 2d Draft Permit reflects countless proposed impositions that result from the Board's staff's highly-controversial determinations about what might be reasonable to impose to control pollutants to the MEP. If, and to the extent that, the Board were to adopt the staff's choices for MS4 permit requirements as its own, the adoption would be far from mere conformance with a federally-prescribed minimum, mandatory requirement of the type that the *Burbank* decision indicates shall be excused from a reconciliation of the Porter-Cologne balancing factors.

The 2d Draft Permit confuses (i) the federal authority and obligation to choose and impose, as an act of discretion, MS4 permit requirements, with (ii) the mere conformity to a federally-prescribed minimum standard. There is a tremendous difference. The difference is that the Board is indeed compelled to establish MS4 permit and waste discharge requirements (under the Porter-Cologne Act and as authorized by EPA), but the chosen requirements are of the Board's own choosing. Again, the Board will be exercising its discretion. When doing so, it must balance and reconcile the § 13241 factors. In other words, federal law compels the Board (as EPA's surrogate) to impose permit requirements; but the California law goes further and commands the Board more prescriptively regarding how to decide what requirements to impose. The mandates do not conflict; they instead complement each other.

The 2d Draft Permit's prefatory findings themselves provide good examples of why the need to balance under the Porter-Cologne Act is not obviated by the appurtenant federal regulations and guidance. As one such example, Finding D-2 (2d Draft Permit, page 8) reads as follows:

"The action of covering all of Ventura County municipalities under a single MS4 permit on a system-wide basis was consistent with the provisions of 40 CFR 122.26(a)(3)(iv), which states that one permit

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application <u>may</u> be submitted for all or a portion of all municipal separate storm sewers within adjacent or interconnected ... [MS4s]; and the Regional Board <u>may</u> issue one system-wide permit covering all, or a portion of all[,] municipal storm sewers in adjacent or interconnected large or medium [MS4s]."

The emphasized word "may" is indicative of the fact that the federal regulation is permissive. In other words, the federal regulation **permits** any surrogate state agency to aggregate far-flung MS4 operations when establishing permit conditions. However, exercising such permission and promulgating a single, "one-size-fits-all," county-wide permit could (given an appropriate factual setting) run afoul of California Water Code § 13241(b). The latter specifically directs the Board's attention to the "**environmental characteristics of the hydrographic unit under consideration**, including the quality of water available thereto."

The point of the above-stated example is that there are many MS4 issues about which the Board is indeed compelled to exercise its discretion under state law, as the authorized surrogate for EPA in implementing corresponding federal law. However, without specific federal prescriptions or mandates regarding the courses of action or permit conditions that which the Board must choose. In those circumstances, the California Supreme Court's *Burbank* opinion requires that the Board must balance and reconcile the § 13241 factors with its desired course of action.

Indeed, the entire body of state and federal case law that governs questions of federal preemption generally supports such a conclusion. The question of whether federal preemption exists is a question of law. See, e.g., Industrial Trucking Association v. Henry, 125 F.3d 1305, 1309 (9th Cir. 1997), (citing Inland Empire Chapter of Associated Gen. Contractors v. Dear, 77 F.3d 296, 299 (9th Cir. 1996)). See also Aloha Airlines, Inc. v. Ahue, 12 F.3d 1498, 1500 (9th Cir. 1993) ("The construction of a statute is a question of law that we review de novo.... Preemption is also a matter of law subject to de novo review."). It does not matter that federal preemption springs from express federal statutory language or from federal regulations that are promulgated under a statute. In either event, federal preemption is a question of law. See Bammerlin v. Navistar International Transportation Corp., 30 F.3d 898, 901 (7th Cir. 1994) (meanings of federal regulations are questions of law to be resolved by the court).

Given that the existence and extent of federal preemption is properly a question of law, the burden of demonstrating to a court that preemption should result rests with the party asserting the preemption (here, the water boards) – because federal preemption is an

⁴ We seriously doubt that the California Legislature intended that all of Ventura County would be treated uncritically as a single hydrographic unit, especially where irrefutable evidence demonstrates tremendous differences between the environmental characteristics of different hydrographic units within the county. This is just one of many reasons why we regard the 2d Draft Permit's for numeric effluent limits as unreasonable.

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affirmative defense. See Bronco Wine Co. v. Jolly, 33 Cal.4th 943, 956-57 (2004) ("The party who claims that a state statute is preempted by federal law bears the burden of demonstrating preemption."); see also United States v. Skinna, 931 F.2d 530, 533 (9th Cir. 1990) (stating that the burden is on the party asserting a federal preemption defense). Therefore, if the Board here were to assert that federal law preempts the application of the Porter-Cologne Act's balancing requirements, the Board would bear the burden of demonstrating that, as a matter of law, the actions required of it under its enabling state law (here, the prescribed balancing of § 13241) are preempted.⁵

Were the Board to assert that federal law preempts the Porter-Cologne Act's balancing requirements, it would face a steep uphill battle. The Supreme Court of the United States has opined that courts should always attempt to reconcile the clash of laws to avoid federal preemption. See Merrill Lynch, Pierce, Fenner & Smith v. Ware, 414 U.S. 117, 127 (1973); see also Rice v. Norman Williams Co., 458 U.S. 654, 659 (1982) ("[T]he inquiry is whether there exists an irreconcilable conflict between the federal and state regulatory schemes."). Both state and federal courts generally recognize a presumption against finding preemption, even when there is express preemptive language. See, e.g., Washington Mutual Bank, FA v. Superior Court, 75 Cal.App.4th 773 (1999):

"In interpreting the extent of the express [federal] preemption, courts must be mindful that there is a strong presumption against preemption or displacement of state laws. Moreover, this presumption against preemption applies not only to state substantive requirements, but also to state causes of action."

Id. at 782, citing Cipollone v. Liggett Group, Inc., 505 U.S. 504, 523 (1992) and Medtronic, Inc. v. Lohr, 518 U.S. 470, 485 (1996).

In the absence of express federal preemptive language, the presumption against federal preemption is even stronger:

"In the absence of express pre-emptive language, Congress' intent to preempt all state law in a particular area may be inferred where the scheme of federal regulation is sufficiently comprehensive to make reasonable the inference that Congress 'left no room' for supplementary state regulation.

Hillsborough County v. Automated Medical Labs, 471 U.S. 707, 713 (1985).

One appellate court erred last year (albeit in dicta) in City of Rancho Cucamonga v. Regional Water Quality Control Bd. – Santa Ana Region, 135 Cal.App.4th 1377 (2006), both when it regarded federal preemption as a factual, evidentiary question and by shifting to the petitioner the burden of disproving preemption, rather than placing the strictly legal burden on the party asserting the federal preemption: "The ... trial court [reasonably] found there was no evidence that the 2002 permit exceeded federal requirements and Rancho Cucamonga [petitioner] does not explain now how it does so." Id. at 1386.

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Armed with understanding of both the strong presumption against preemption and the principles that preemption is both an affirmative defense and a question of law, the Board cannot pretend that the federal regulatory scheme at issue here precludes the Board's application of the California Water Code § 13241 balancing factors to the policy choices before it.

First, there is no express federal preemption here that would preclude § 13241 balancing. If the preemption exists, it must be implied – and therefore must overcome the strong presumption against implied preemption. Second, it cannot be fairly argued that the federal regulatory scheme at issue here "left no room" for supplementary state regulation. To the contrary, the federal statutory scheme here elevates EPA's authorized state agency surrogate to the level of the "major" or primary governmental actor.

Finally, as explained above, the Board will wield its discretion when deciding what pollution controls are and are not "practicable." Building Industry Ass'n of San Diego County v. State Water Resources Control Board, 124 Cal.App.4th 866, 882 (2004) ("[T]he language of [§ 402(p) – i.e., the MEP standard] does communicate the basic principle that the EPA [or its state surrogate] retains the discretion to impose "appropriate" water pollution controls...."). Given the breadth of the Board's federal discretion, the Board cannot legitimately claim that it lacks the discretion to apply and reconcile the six specific balancing factors which the California Legislature carefully prescribed in Water Code § 13241.

II. If adopted, the 2d Draft Permit would continue the Board's persistent failure to take into account the naturally high variability of storm water and the need to respect nature generally.

Throughout the history of the Board's regulation of storm water quality and MS4 operators, the Board's actions have failed to appreciate and take into account the naturally high variability of storm water. The long running failure is shameful because even slight attention to the California Water Code § 13241 balancing factors should have led to more flexible and accommodating storm water quality objectives, standards, and permit conditions. Specifically concerning storm water regulation, the most relevant § 13241 factors are the first five of the six:

- (a) Past, present, and probable future beneficial uses of water.
- (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
- (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
- (d) Economic considerations.

(e) The need for developing housing within the region.

Each of these five balancing factors should be viewed in a new and different light when one is considering the regulation of highly-variable storm water quality and quantity, as opposed to pollution that is discharged from **anthropogenically** generated sources such as industrial point source or wastewater treatment plant discharges.

A. California Water Code § 13241 balancing factors require meaningful consideration of the <u>natural</u> variability of storm water action.

The first factor, the "past, present, and probable future beneficial uses of water," needs to be considered in light of the undisputable fact that the beneficial uses of any given water course will be radically different during or soon after a torrent than it would during a dry summer or after a modest winter rain. That is: the beneficial uses of any given water course (whether natural or channeled) will vary tremendously in light of the fact that nature is wildly variable.

Consequently, it is not only "probable" but certain that the "future" beneficial uses of storm-impacted water courses will fluctuate substantially depending upon storm conditions, just as they always have in the "past." Yet the Board's regulations and permit conditions have generally not allowed for such fluctuations. Instead, the 2d Draft Permit would compound decades of regulatory disregard for storm water variability in wet and dry weather beneficial use. The proposals include a turbidity (i.e., clarity) standard of 50 NTU for discharges from "highly regulated" construction sites in Ventura County that seek to avoid a 6-month grading prohibition. This numeric limit would apply to construction site discharges that would potentially merge with the waters from "Mud Creek," a natural water course in Ventura County which remains largely in its non-anthropogenic and undeveloped state. As is the case with all Ventura County watercourses (wild or tamed), Mud Creek's water quality naturally varies. During times of relatively light flows, the water will be relatively clear. But during intense storm events, "Mud Creek" earns its name by having turbidity readings that shoot off the charts.

In fact, during the winter of 1969, when storms were especially heavy, scientists estimated that 100 million tons of suspended sediment flux flowed from the creeks, channels and rivers of the surrounding area into the Santa Barbara Channel (i.e., largely from Ventura County) – which was a tonnage amount greater than the combined total amount during the preceding 25-yr dry period. See "Climate Change and the Episodicity

⁶ 2d Draft Permit, Part 4 § F. I. 1. prohibits grading from the following constructions sites within Ventura County (referred to in this letter as "Highly Regulated" construction sites) unless it can be demonstrated that the storm water discharges from the site will meet a total suspended solids numeric effluent limit of 100 mg/L or less and a turbidity numeric effluent limit of 50 NTO or less which limits can only be achieved by use of chemically induced sediment removal technologies referred to as Advanced Treatment Systems.

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of Sediment Flux of Small California Rivers," Douglas L. Inman and Scott A. Jenkins, *The Journal of Geology*, volume 107 (1999), pages 251–270. Remarkably, that amount of sediment flux yielded in 1969 would fill up the inside of Pasadena's Rose Bowl Stadium to the top about 100 times.

In addition, that same amount of suspended relatively localized sediment flux (100 million tons) equates to more than 25 times the tonnage of sediment that EPA estimated would have left all large (i.e., five acre or greater) construction projects commenced in 1999 **nationwide** (3.98 million tons) if one were to assume that no one in the nation deployed any construction best management practices. Moreover, according to the same EPA analysis, nationwide adherence to construction site "best management practices" would have reduced the nation's annual yield of construction sediment yield from roughly 3.98 million tons down to roughly 1.07 million tons.

In other words, the sediment loadings from all large construction projects commenced in 1999 would have totaled 1.07 million tons nationwide if all such projects had faithfully deployed construction best management practices, compared to the 100 million tons of sediment flux that naturally entered the Santa Barbara Channel in the winter of 1969. This example proves that, obviously, sediment loads from construction activities are infinitesimal in comparison to natural pre-Clean Water Act sediment loads when analyzed at any meaningful scale. Why on earth, then, is the Board considering forcing Highly Regulated construction sites to limit their storm water discharges in Ventura's naturally sediment driven alluvial drainage systems to only 50 NTU, which is nothing? Certainly, such a permit requirement reflects no implied or other balancing of factors under California Water Code § 13241(a), (b), or (c).

B. The 1972 federal amendments that became the Clean Water Act were aimed squarely at <u>anthropogenic</u> (man-made or maninfluenced) discharges and not at natural storm water flows; yet the Board has persistently failed to distinguish between the two.

In its "Report to Congress on Phase I Storm Water Regulations," dated February 2000 ("EPA 2000 Phase I Report"), EPA estimated amount of suspended sediment yields that would have been contributed to the nation's waters from large (five-acre-plus) construction activities started in 1999 if there had been storm water pollution prevention measures in place. EPA's analysis indicates that, in 1999, an estimated 62,755 large construction projects (impacting 5 or more acres) were commenced, impacting roughly 650,000 acres nationwide. EPA 2000 Phase I Report, ¶ 4.1.1. To conduct its analysis, EPA selected a sample of sites in two ranges, those 5 up to 10 acres and those 10 or more acres. See id., ¶ 4.3.2 and n.3. Based on the sampling, EPA estimated that the sediment yield from those sites, assuming no storm water pollution prevention measures had been utilized, would have been 3,977,518 tons of sediment (roughly 6 tons per acre), and the nationwide adherence to construction best management practices ("BMPs") would have reduced the sediment yield from construction activities by 73%.

⁸ *Id.*, ¶ 4.3.2 and Table 4-1.

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In order to better understand the correct application the § 13241(a) balancing factor (the beneficial uses of waters – past, present and probable future) in the context of storm water's high natural variability, it is necessary to understand also the Clean Water Act's history vis-à-vis storm water.

As noted above, the U.S. Congress was spurred into writing the Clean Water Act by the fact that the Cuyahoga River near Cleveland caught fire and burned in 1969 (coincidentally, the same year that 100 million tons of sediment flux **naturally** flowed in the Santa Barbara Channel). Of course, the problem with the Cuyahoga River then was not one of mud flows (natural or otherwise) or torrential rains. Instead, the problem was one of **anthropogenic chemical pollution** being discharged from factory point sources into the river – which is why it caught fire.

Accordingly, when the 1972 federal amendments were enacted, the focus was not on phenomena like mud-flows (natural or otherwise) or highly variable rain amounts, it was instead on the anthropogenic point-source pollution that was impacting the waters of the United States. This fact is apparent from several key aspects of the original legislation which remain in the statute today. For example, in the Clean Water Act, 33 U.S.C. § 1362(19) defines "pollution" as "the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water" — in other words, anthropogenic impacts. Therefore, naturally-caused and naturally-variable loads and concentrations of certain constituents, such as sediment and bacteria, impacting the waters do <u>not</u> constitute "pollution" as defined by the Clean Water Act. Accordingly, when nature discharged 100 million tons of sediment into the Santa Barbara Channel during the winter of 1969, none (or virtually none) of that massive sediment load flowing through Ventura County was "pollution" as defined by the Clean Water Act.

Undoubtedly, during that stormy Ventura County winter of 1969, the waters flowing into and through Ventura County's MS4 systems would have exceeded all of the "municipal action levels" and numeric standards (such as turbidity and total suspended solids standards) that the Board is now contemplating in the 2d Draft Permit in Nature inevitably violates any and all such limits.

Accordingly, the Board should be extremely careful when establishing any numeric standards and objective limits concerning storm water, and then making such standards inviolate. Under the 2d Draft Permit, a permittee effectively violates the federal law (and is subject to enforcement action, citizen suit, penalties, and attorneys' fees and costs) whenever one causes **or contributes to** any exceedence of such a regulatory standard. See 2d Draft Permit, Part 3, Section 1 (page 29): "Discharges from the MS4 that cause **or contribute to** a violation of water quality standards are prohibited." The Board therefore needs to ask itself this: "By its decisions, does it intend to cause citizens and permittees to be in violation of the federal law (and therefore subject to enforcement actions, citizen suits and penalties) whenever they **contribute** to a numerical violation that is unavoidably and overwhelmingly **caused** by nature?" One would hope that the answer is obviously and resoundingly "no." But given the Board's

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regulation of storm water to date and the unreasonable proposals in the 2d Draft Permit, the answer momentarily appears to be "perhaps."

Similar to the Clean Water Act's definition of "pollution," the overarching objective of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters[.]" 33 U.S.C. § 1251(a). Arguably, the overall aspiration of "restoring and maintaining" the natural characteristics of the Nation's waters was never intended to be a concrete, absolute Congressional mandate. (If it had been, then all of the nation's dams should have been promptly torn down – which is obviously not what Congress intended by the overarching objective.) Nevertheless, the overarching "restore and maintain" objective does suggest that, whenever EPA and its surrogate's state agencies are seeking to achieve appropriate balances under the Clean Water Act's provisions, background, natural characteristics of the waters should be the "guiding star" or perhaps the brass ring of regulatory idealism: "[T]he guiding star is the intent of Congress to ... preserve the quality of the Nation's waters. All issues must be viewed in the light of that intent." American Petroleum Institute v. EPA, 540 F.2d 1023, 1028 (10th Cir. 1976).

Potentially conflicting with the overarching "restore and maintain" nature objective (but only if one were to subordinate improperly the "guiding star" of Congress' intent to respect and preserve nature), the Clean Water Act also included an interim goal of making all of the Nation's waters fishable and swimmable water by July 1, 1983. 33 U.S.C. § 1251(a)(2). However, because the "guiding star" of Congressional intent was to respect and preserve nature, it is unthinkable that Congress intended to make waters "fishable and swimmable" if they were not naturally so. For example, Congress did not intend for regulators to impose conditions that would require dischargers to heat their discharges into the naturally icy rivers of northern Alaska, so that they could be rendered swimmable, nor to render naturally-occurring quicksand in Louisiana fishable and swimmable through extensively treated discharges (e.g., advanced treatment systems). Nor is it reasonable to imagine that Congress intended that the waters of Ventura County should have been fishable and swimmable during that same winter of 1969, when 100 million tons of sediment flux flowed into the Santa Barbara Channel.

We trust NRDC and all other enlightened environmental organizations will swiftly and enthusiastically embrace our position that Congress intended as its "guiding star" for the Clean Water Act respect for nature and for natural forces.

Probably as quickly as the 1972 federal legislation was signed into law, the Board here, pursuant to the Porter-Cologne Act, adopted the "fishable-swimmable" standard as its objective for essentially all of the waters within the Los Angeles region. During that early era, however, neither EPA nor any of the state surrogates considered storm water to be covered by the Clean Water Act. In 1973 and 1976, EPA promulgated regulations that "categorically exempted" from water quality permit requirements most activities associated with storm water discharges to U.S. waters. See 56 Fed. Reg. 56,548, November 5, 1991 (describing the history of EPA storm water regulation).

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NRDC successfully sued EPA concerning this categorical exemption, persuading the court that the Clean Water Act's statutory language, legislative history, and irrefutable scientific evidence of **anthropogenic** storm water pollution compelled regulating some storm water runoff. *Natural Res. Def. Council v. Costle*, 568 F.2d 1369, 1379 (D.C. Cir. 1977) (holding unlawful EPA's categorical exemption of storm water discharges from NPDES permitting requirements). EPA responded by trying to promulgate various storm water regulations in 1979, 1980 and 1984. However, constant litigation and political pandemonium ensued – and none of these regulations was successfully implemented. *See NRDC v. U.S. E.P.A.*, 966 F.2d 1292, 1296 (9th Cir. 1992) (explaining this history).

Ultimately, Congress stepped in to address EPA's ongoing inability to regulate storm water pollution, and enacted the Water Quality Act of 1987. In it, Congress amended the Clean Water Act and prescribed the processes by which EPA or a state surrogate should regulate storm water runoff. The legislative mandate had four main components:

- 1. An exemption from storm water regulations for agricultural activities;
- 2. A qualified exemption from storm water regulations for certain aspects of extractive industries (oil drilling, mining);
- 3. The requirement that EPA regulate through a permitting process storm water discharges from "industrial activities," which were later defined by EPA to include large (five-acre-plus) and later small (one-acre-plus) construction activities; and
- 4. The requirement that EPA or the state surrogates phase-in the regulation of MS4s.

Thus, it was the 1987 legislation that provided the discretionary MEP standard under Clean Water Act § 402(p)(3) for MS4 operators, which is the present focus of the Board's attention.

One would expect that the 1987 legislative introduction of storm water regulation into the Clean Water Act would have prompted all regulators to revisit the various water standards and objectives that had previously been established with only anthropogenically generated and purely point source discharges pollution in mind. Specifically, prior to 1987, all of the focus of the regulations was upon the discharge of anthropogenically generated and purely point-source pollution (industrial pollution and municipal wastewater) into the Nation's waters. Under the pre-1987 regulations, therefore, the interim nation-wide objective of "fishable-swimmable at all times" made perfect sense. Everyone except the factories and POTWs themselves would want anthropogenic discharges to be that clean.

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Following the 1987 statutory introduction of storm water into the Clean Water Act, however, the nation-wide objective of fishable and swimmable "by July 1, 1983" no longer made perfect sense, because storm water discharges even from natural lands (i.e., lands that are entirely devoid of anthropogenic activities) are not fishable-swimmable at all times. Instead, especially when major storms occur, swollen water courses are often not swimmable, nor are they fishable – naturally. For example, one can be certain that many of the watercourses in Ventura County were not fishable-swimmable during much of the winter of 1969, when 100 million tons of sediment and flux flowed into the Santa Barbara Channel.

The difficulty is that nature, during substantial storms, routinely violates the interim objective that Congress targeted for achievement by July 1, 1983 (i.e., the fishable-swimmable goal). Given the complex variability of storm water flow and constituent characteristics, and given enough time, nature will eventually violate any arbitrary standards that regulators might settle upon (for example, any numerical flow or turbidity standards). The Board here has never recognized this reality, and has instead compounded its failure by embracing the so-called "California Toxics Rule" (CTR) as applicable to the region's storm water, regardless of that fact that nature has never comported with the ultra-clean standards that comprise CTR, and it never will.

Importantly, even storm water run-off flowing from undeveloped lands (lands that are completely free of any anthropogenic influences) will violate CTR and other fixed regulatory standards concerning concentrations of bacteria, turbidity, naturally-occurring metals and minerals, selenium, etc. Unless and until the Board revises its objectives and standards and permit conditions to take into account the high variability of storm water and the natural consequences of storms and wet weather on "past, present and probable future beneficial uses of water" as required by California Water Code § 13241(a), the Board's regulation of storm water will continue to be unreasonable.

C. The other relevant § 13241 balancing factors further indicate the need for flexibility and moderation when regulating storm water pollution, especially as necessary to accommodate the naturally variable characteristics of storm water.

In addition to Water Code § 13241(a), which requires consideration of the beneficial uses of the waters over time, the other § 13241 balancing factors similarly indicate the need for the Board to reconsider its regulation of storm water discharges. Foremost among the remaining § 13241 balancing factors is the one set forth in subsection (b), which requires consideration of the "[e]nvironmental characteristics of the

⁹ Storm intensity, not storm duration, evidently is the most correlative variable that drives the loading into storm water of natural "contaminants" such as sediment flux and naturally-present minerals, bio-materials, trace metals, etc.

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hydrographic unit under consideration, including the quality of water available thereto." Close attention to this balancing factor would lead to several unavoidable conclusions.

First, the "environmental characteristics" of any given hydrographic unit will vary naturally over a range of different storm events. For example, the above-mentioned Mud Creek (near Ojai in Ventura County) will present a far higher turbidity reading during and following an intense storm than it will during and following a moderate or mild rain. Indeed, every hydrographic units (wild or tamed) has environmental characteristics that are **naturally** highly variable in response to wet weather and storm events depending where in the unit and when the characteristics are considered. This principle applies to any ephemeral stream, to any creek, to any flood control channel, to any river, and to any ocean outfall. (For example, not every winter does 100 million tons of sediment flux flow into the Santa Barbara Channel.) Consequently, proper attention to the § 13241(b) "environmental characteristics" factor should result in the flexible regulation and accommodation of the natural variability of any water course ad its response to storm water runoff.

Second, environmental characteristics will also vary widely from one hydrographic unit to another (based on soil characteristics and topography or relief, especially). Consequently, attention to the subsection 13241(b) "environmental characteristics" balancing factor should also result in the flexible regulation and accommodation of environmental differences among different hydrographic units. Unfortunately, however, the Board has persistently failed to take any close look at the differences between water bodies and units in terms of their natural loadings, propensities and responses to variable storm water influences.

Finally, concerning environmental characteristics of the waters, one must add to these differences the highly variable nature of the storms themselves. Storms are like snowflakes, in that no two storms are exactly alike. But when it comes to being variable, storms beat the stuffing out of snowflakes. Storms are not just unique and variable in terms of their individual shapes, but also their spatial dispersions, durations, relative intensities, temporal dynamics, etc. Concerning storms, meteorologists can at best make short-term forecasts and some only rough predictions relative to total rainfall over seasonal and longer timeframes and over proximate geographic areas based on history and things like "rain shadows" (the leeward sides of mountain ranges) and the orographic (cloud-lifting) effects that occur on the windward sides of mountain ranges. Otherwise, storm events are so wildly variable in all but the very short term as to be effectively random and unpredictable.

The only things that are certain, therefore, are the extremely high variability of storm flows and their influence on receiving waters, and the fact that, by degree and over time, the rains will eventually arrive and create **naturally** wide-ranging water quality impacts. If the Board were to appreciate these simple realities concerning the "environmental characteristics of the water bod[ies]," then the Board would quickly abandon the notions that all storm water discharges into Ventura County receiving waters

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must achieve numeric effluent limits (called maximum action levels ("MALs") in the 2d Draft Permit, part 2) and that all discharges from Ventura County Highly Regulated construction sites must achieve particular sediment-related effluent limits (such as 50 NTU or 100 mg/L of TSS).

California Water Code § 13241(c) also is compelling in light of both the natural variability of storm water and natural loadings into receiving waters from non-anthropogenic (natural) sources. Subsection (c) requires the Board to take into account "[w]ater quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area." Close attention to this factor would quickly lead the Board to conclude that – given nature itself – that some water quality conditions during storms are not reasonably amenable to "coordinated control."

An example is the water quality "contaminant" known as "fecal indicator bacteria." These bacteria are worrisome because they are used as a proxy for various pathogens that sometimes accompany them and can be harmful to humans. However, fecal indicator bacteria are also omnipresent in nature (even in areas that are free from any anthropogenic influence) due to the eating and excretory habits of fauna in the wild – such as birds, bats, squirrels, deer, coyotes, field mice, etc. And whenever it rains, these fecal indicator bacteria are **naturally** present in the storm water – unavoidably so, and they have been for eons.

Unfortunately, the Board has adopted numeric water quality standards concerning the fecal indicator bacteria which cannot be met under any realistic scenario. If, through permit conditions, Ventura County MS4 operators are strictly required to meet numeric limits via incorporation of TMDLs, WLAs or otherwise, then the permittees would need to be constantly diapering and re-diapering all of the wild fauna in the county. And as anyone who has ever tried to capture and diaper a wild squirrel or sparrow can attest, it's virtually impossible to do that even once – let alone repeatedly and constantly to all of the wild critters.

The point is that the California Water Code § 13241(c) balancing factor requires consideration of the "[w]ater quality conditions that could **reasonably** be achieved through the coordinated control of all factors which affect water quality in the area." The Board therefore needs to ask itself whether it is reasonable to ask the MS4 operators to rid all storm water flowing through their systems of **naturally** occurring loads and concentrations of constituents, which, like non-anthropogenic loads of sediment, certain metals and fecal indicator bacteria, would be very much present in the county's storm water even if mankind had never crossed the Bering Straits.

The fourth balancing factor, California Water Code § 13241(d), also is relevant here; and it requires extra-special consideration in the context of naturally variable storm water. Subsection (d) requires consideration and reconciliation of the economics of, in this case, regulating storm water. How much should MS4 operators be required to spend

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to fight anthropogenic pollution entering and exiting their MS4s? Reasonable persons could probably disagree about what amount is fair. But how much should the MS4 operators be required to spend in order to fight nature – especially given that the "guiding star" of the Clean Water Act is respect for and the preservation of nature? For example, how much should the MS4 operators be required to spend so that a surfer can "carve waves" immediately after a storm precisely where nature has always discharged its non-anthropogenic fecal indicator bacteria? And how much should Ventura County homebuilders be required to spend in order to install chemical "advanced treatment systems," for Highly Regulated construction sites in order to keep their storm water discharges to 50 NTU and 100 mg/L of total suspended solids during the winter months – while nature may be concurrently sending tens of millions or hundreds of millions of tons of sediment flux into the Santa Barbara Channel?

Finally, California Water Code § 13241(e) requires the Board to consider and weigh "[t]he need for developing housing within the region." It is particularly important when considering the subsection (e) housing factor to recognize that storm water "pollution" from construction activities differs in kind from the anthropogenic pollution that caused the Cuyahoga River to catch fire in 1969. Specifically, the predominant "pollutant" that is associated with construction activities is sediment-laden storm water run-off. When construction activity takes place, the ground is temporarily disturbed. If a storm event then arises, there will be muddy water; and gravity will move the muddy water off site. The result can be environmentally harmful by degree in some circumstances, but it all depends on the context. For example, turbidity readings of 200 NTU, 500 NTU or 1,000 NTU mean nothing in the context of a winter in which nature deposits 100 million tons of sediment in the Santa Barbara Channel through storm water.

Moreover, merely through the application of "best management practices," sediment discharges can be substantially minimized – albeit in relative terms. One's ability to minimize sediment discharges and mud is relative to the strength of the given storm. The more intense the storm, the more sediment discharge from the construction site is probable – if not unavoidable – by degree. That is why any arbitrary, fixed numerical effluent limits and MALs make no sense in the MS4 or construction site storm

¹⁰ As is discussed above in footnote 6, EPA's 2000 "Report to Congress on Phase I Storm Water Regulations" indicates that the estimated 62,755 large construction projects commenced in 1999 nationwide (impacting roughly 650,000 acres) would have yielded 3.98 million tons of sediment nationwide if no "best management practices" were applied, but would have yielded only 1.07 million tons for the year nationwide if all such projects had faithfully deployed "best management practices." EPA 2000 Phase I Report, ¶ 4.3.2 and Table 4-1. Thus, by EPA's estimates, the universal application of the "best management practices" then available would have reduced the sediment yield from the nation's construction projects commenced in 1999 by 73%. Given the forces of nature, there are naturally diminishing returns to trying to make further decreases.

¹¹ The fact that storm water constituent loads and concentrations vary wildly is why establishment of a "design storm," for alternative BMPs has understandably proven to be difficult.

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water context. The storms themselves are wildly variable. Nature smiles on the variability of storm water constituents, including sediment loads. Why, then, should not the Board not do so as well, at least to some reasonable degree?

Lastly concerning the California Water Code § 13241(e) factor (housing needs), the factor is especially important when considering prohibitions concerning hydromodification and low impact development such as those proposed in the 2d Draft Permit. The need for housing units is real. If the housing factor were given no weight, then additional housing would never be built due to any countervailing weight of the Board's potential consideration of natural "environmental characteristics" (§ 13241(b)) and an otherwise-appropriate "guiding star" respect for the maintaining nature. Neither the California Legislature (in enacting the Porter-Cologne Act) nor the U.S. Congress (in enacting the Clean Water Act) intended to stop all land development or to make it impossibly arduous and expensive to fulfill society's housing needs. Especially concerning low impact development and hydromod, then, it is essential that the Board consider and balance the need for housing, among the other factors.

With that background about the Board's discretion and the need to balance the prescribed factors, the remainder of this letter addresses various specific aspects of the 2d Draft Permit which we find most in need of further reform.

III. Numerous specific aspects of the 2d Draft Permit should be substantially revised to avoid unreasonable – if not impossible to satisfy – requirements.

As the sections above explain, we believe that the Board has persistently failed to adopt reasonable and proper regulations concerning the management and control of storm water. We also believe that the failure would be cured if the Board were to balance proposed MS4 requirements in light of the California Water Code § 13241 balancing factors, as federal and California law require. Accordingly, as you read our concerns regarding specific proposals in the 2d Draft Permit, the constant thread is our prayer for the Board to strike a more reasonable balance in regulating storm water.

Generally, our concerns fall into seven categories, and we explain each below. The seven concerns are:

A. The proposed hydromodification and low impact development ("LID") requirements are unduly prescriptive, absolute and inflexible. In many instances, the requirements would be impossible or infeasible to achieve and/or lead to negative, unintended consequences. Most importantly, the proposed hydromod and LID requirements fail to permit enough flexibility to achieve the mitigation of impacts at various appropriate scales (i.e., lot-by-lot, tract map level, project or specific plan level, sub-regional or regional levels).

- B. The same proposed hydromod and LID measures would be best considered as goals to be approached and achieved as much as is deemed reasonably feasible through the existing public participatory processes required by the California Environmental Quality Act ("CEQA"), which already requires scrutiny and incorporation of all feasible mitigation measures to address any project's adverse environmental impacts.
- C. There should be more appropriate "grandfathering" provisions to prevent the changing permit requirements from applying to existing land use approvals and already pending plans and applications.
- D. The proposed provisions would improperly purport to create liability attributable to non-permittees, and may improperly conflict with the conditions imposed through the state-wide Construction General Permit.
- E. The Board should not adopt crippling 6-month grading restrictions coupled with the "alternative" of utilizing chemical "advanced treatment systems" to achieve an ultra-low turbidity standard. Each of these alternatives is unreasonable. The regulated community should not be stuck on the horns of such an unnecessary dilemma.
- F. The proposed establishment of "numeric effluent limits," which are inaccurately labeled in the 2d Draft Permit as "municipal action levels," is unsound as a matter of policy and inappropriate under both (i) California law, and (ii) federal regulations as well (if the Board were to try to feign a federal mandate).
- G. The proposal to require immediate compliance with numerical TMDLs and WLSs established for the Ventura County waters is both unreasonable and squarely at variance with the implementation schedules previously established for many of the same TMDLs.
- A. The proposed hydromodification and low impact development ("LID") requirements are unduly prescriptive, absolute and inflexible. In many instances, the requirements would be impossible or infeasible to achieve and/or lead to negative, unintended consequences. Most importantly, the proposed "hydromod" and LID requirements fail to permit enough flexibility to achieve the mitigation of impacts at various appropriate scales (i.e., lot-by-lot, tract map level, project or specific plan level, sub-regional or regional levels).
- Part 5, § 5.E.III.1 of the 2d Draft Permit would, if adopted, impose new and highly-prescriptive "performance criteria" requirements, which would be applicable to all new development and redevelopment projects identified in subsection 5.E.II. We respect the motivation behind these proposals, which we assume are aimed at requiring serious

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consideration of "low impact development" (LID) techniques and close attention to hydromodification concerns.

Notwithstanding our appreciation for the motives, we have many concerns about the specific proposed prescriptions. Conceptually, our concerns are threefold:

- First, as a general proposition, any and all land development and construction will necessarily have some effect on hydrology and the percolation of storm water, etc. It should be permitted to do so. The environmental impacts storm water flow changes can be minimized through careful design, planning and implementation, but only to the extent reasonably feasible taking into account physical condition of regulated sites and their receiving waters. Unduly prescriptive requirements and outright prohibitions (express or effective) cannot be justified under a proper application of the Porter-Cologne Act balancing factors.
- Perhaps most importantly, the proposed requirements would prevent the
 regulated community from addressing and mitigating storm water flow
 change impacts at different scales and in ways most appropriate to the
 location, the circumstances, the degree of existing development, etc. A
 tightly controlled, complex substitution or exemption process is not
 sufficient to allow appropriate development design to achieve appropriate
 controls for adverse environmental impacts related to changes in storm
 water flow.
- The specific requirements that are proposed in the 2d Draft Permit are far too prescriptive, given that they are currently proposed as inviolable absolutes (for example, each project site, regardless of size, receiving water, condition, or physical characteristics must meet a standard of effective impervious area of 5% and post-development flows must maintain an SP=1 in receiving waters-- no more). The strict requirements also overlap in their application, meaning that they would necessarily preclude the employment of creative approaches mitigation of the impacts of development. Therefore, we have proposed permit language that would, if adopted, afford significantly more flexibility in approaches to the consequences of development, while still meeting the objectives that underlie the proposed requirements.

Looking at each proposed hydromod control requirement, the 2d Draft Permit, in Part 5, Section E.III.1 (page 51), contains the proposed requirement that all projects must limit the impervious area to 5% of the site or render any excess impervious area ("EIA") above 5% "ineffective." The aim of the requirement is to encourage or require developers and those who approve projects to use low impact development strategies (LID) to increase storm water percolation, infiltration, storage, or evapo-transpiration;

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and the goal is to control pollutants, pollutant loads, and runoff volume discharged from impervious surfaces.

Although the aim and goal are laudable and we embrace LID strategies, the uncritical nature of the particular proposed requirement is problematic. We have three primary technical and policy concerns regarding the 5% EIA requirement:

- a. The use of the imperviousness area measure as a criterion on an uncritically small scale (project level) is inappropriate.
- b. The imposition of an EIA limit is redundant and superfluous when development decisions are also regulated by Erosion Potential (Ep) standards; and
- c. The application of any one-size-fits-all EIA limit is inappropriate, unnecessary, and likely to be infeasible in many cases.

Each of these concerns is addressed below.

a. The Improper Use of Imperviousness Area as a small scale criterion.

In 2003, the Water Environment Research Foundation published a report entitled "Physical Effects of Wet Weather Flows on Aquatic Habitats: Present Knowledge and Research Needs" (Roesner and Bledsoe 2003). The report emphasized the limitations of current attempts to link stream impacts to any single measure of development, such as total imperviousness, observing that individually these measures provide little meaningful information to understand key processes and to create practical strategies for mitigation.

The authors contended that flow controls in urban drainage systems have strong influence on runoff hydrology, but that the influence is not well reflected in studies that attempt to relate stream impacts to gross imperviousness only (e.g., to any particular percent of impervious area). They stressed that models of reach-scale habitat changes (in other words, looking at an entire reach of an appurtenant water course) would better account for the connectivity and conveyance of the drainage system, and therefore lead to better consideration of relevant storm water controls.

Subsequent papers have also highlighted the difference between total impervious area, which they argue need not be specifically limited, and effective impervious area, which is more meaningful (Walsh et al, 2005; Walsh, Fletcher and Ladson, 2005). ¹³ This

Roesner, L.A., and Bledsoe, B.P., (2003). Physical Effects of Wet Weather Flows on Aquatic Habitats: Present Knowledge and Research Needs, Water Environment Research Foundation, 00-WSM-4.

Walsh, C.J., Roy, A.H., Feminella, J.W., Cottingham, P.D., Groffman, P.M., Morgan, R.P.III, (2005). The Urban Stream Syndrome: Current Knowledge and the Search for a Cure. Journal of the North American Benthological Society, 24(3), 706-723; Walsh, C.J., Fletcher, T.D., and Ladson, A.R. (2005). Stream restoration in urban catchments through redesigning storm water

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further supports the idea that it is the overall drainage design which is most important, rather than specific limits on impervious area. Studies by Booth *et al* (2004) also demonstrate that impervious area alone is a flawed surrogate of river health.¹⁴

These conclusions make sense in light of the current scientific understanding of the mechanisms by which land use changes translate to stream impacts. Natural hydrologic and geomorphic processes (i.e., water flows and erosion) are necessarily changed by development and the introduction of impervious surfaces. Development of impervious surfaces like streets, driveways, sidewalks, roofs, etc., all change (i) the connections of the surface to drainage systems, (ii) drainage densities, (iii) compaction of soil, and (iv) removal of vegetation. Consequently, the natural proportions of infiltration, runoff and evapotranspiration are altered in such a way as to increase (a) runoff volumes, (b) the frequency of runoff events, (c) the long-term cumulative duration of runoff, and (d) peak flows. Sediment supply to streams is also reduced, which can compound the effects of increased flows.

The current state of scientific knowledge indicates that impacts downstream, such as channel enlargement, decreased bank stability, and simplification of stream habitat features, are linked to the long-term increase in volumes, durations and frequencies of the entire range of sediment transporting flows and the resulting increase in "work" done on the channel boundary. However, both the process changes and the resulting impacts downstream are highly variable for any given percent impervious surface area. The variations are due to local watershed influences and the nature of the development site. In other words, the downstream impacts should be considered in the context of a broader view of the circumstances. Impervious surface percentages should not be viewed myopically.

Both regional and sub-regional climate and, especially, local watershed characteristics can have a very strong influence on the extent to which land use changes alter hydrologic processes.¹⁵ For example, where soils have high infiltration capacity, the

systems: looking to the catchment to save the stream, Journal of the North American Benthological Society, 24(3), 690-705.

Booth, D.B., Karr, J.R., Schauman, S., Konrad, C.P., Morley, S.A., Larson, M.G., and Burges, S.J., (2004). Reviving Urban Streams: Land Use, Hydrology, Biology, and Human Behavior. Journal of the American Water Resources Association, October, 1351-1364.

Chin, A., (2006). Urban Transformation of River Landscapes in a Global Context. Geomorphology, 79, 460-487; Poff, N.L., Bledsoe, B.P., and Cuhaciyan, C.O. (2006). Hydrologic variation with land use across the contiguous United States: Geomorphic and ecological consequences for stream ecosystems, Geomorphology, 79, 264-285; Gregory, K.J., (2006). The Human Role in Changing River Channels. Geomorphology, 79, 172-191; Konrad, C.P., Booth, D.B., and Burges, S.J., (2005). Effects of Urban Development in the Puget Lowland, Washington, on Interannual Streamflow Patterns: Consequences for Channel Form and Streambed Disturbance. Water Resources Research, 41(W07009), 1-15.

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conversion of open space to impervious surfaces will cause greater increases in runoff and stream flows compared to development on soils with low infiltration characteristics. The resulting in-stream effects can therefore also be more pronounced when high infiltration capacity lands are developed. Obviously, this suggests that policy-makers might want to encourage development on lands that naturally have low infiltration characteristics. However, an uncritical, "one-size-fits-all" approach, such as the 5% EIA proposal in the 2d Draft Permit, would allow no such distinction and may be counter productive-inducing development in more permeable areas so that projects can more readily infiltrate storm water.

Moreover, new approaches, including incorporation of BMPs (on site, in-stream and downstream) and the use of watershed protection and low impact development (LID) strategies (as suggested by Section 5.E.III.2 of the 2d Draft Permit) are changing the nature of developments with respect to the characteristics that cause alteration of hydrologic processes. Indeed, the application of reasonably feasible and appropriate treatment control BMPs are already required components of new developments and redevelopments in accordance with the current Ventura County MS4 Permit.

Some treatment control BMPs have the capacity to infiltrate a significant portion of runoff volumes. One study summarized data for BMPs which showed that biofilters and dry-extended detention basins provide an average of approximately 40% and 30% reduction, respectively, in the volume of captured runoff. In addition, flow duration control basins are currently being incorporated into new development projects to address hydromodification. These hydromodification control facilities will also provide water quality benefits. Importantly, they can also be applied at multiple scales, from an individual project scale to a regional scale, to address both proposed and existing flow issues.

Recent modeling studies also show the so-called "urban cluster" design to be one of the most effective at reducing runoff volume. In 2000, EPA summarized a literature review on the application of LID in new development and existing urban areas, as well as studies of LID projects which provide evidence of effectiveness in reducing runoff

Strecker, E.W., Quigley, M.M., Urbonas, B., and Jones, J., 2004. Analyses of the Expanded EPA/ASCE International BMP Database and Potential Implications for BMP Design, In: Proceedings of the World Water and Environmental Congress 2004, June 27 - July 1, 2004, Salt Lake City, UT. Edited by Sehlke, G., Hayes, D.F. and Stevens, D.K., ISBN 0-7844-0737-1, ASCE, Reston, VA.

¹⁷ Brander, K.E., Owne, K.E., and Potter, K.W. (2004). Modeled Impacts of Development Type on Runoff Volume and Infiltration Performance. Journal of the American Water Resources Association, 40(4), 961-969.

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volumes.¹⁸ The report found that LID offers both economic and environmental benefits, but that various combinations of structural BMPs employed in conjunction with the LID techniques could result in achieving the best possible watershed objectives. The appropriateness of all such measures depends on flexibility in MS4 permit requirements that allows circumspect consideration of the site conditions and surrounding circumstances, such as soil permeability, slope and water table depth, in addition to spatial limitations.

b. The imposition of a 5% EIA limit could be redundant, superfluous or even harmful when development decisions are also regulated by Erosion Potential (Ep) standards.

There are new approaches for managing storm water which take a broader and more comprehensive view of land use, and do not foist "one-size-fits-all" formulas on individual lots and developments. These approaches have the potential to reduce substantially the kinds of changes to hydrologic processes that took place through traditional, uncritical development practices. Furthermore, changes in site design practices, coupled with knowledge of local watershed characteristics, can render gross measures of imperviousness unsuitable for either predicting or controlling development impacts.

Metrics such as "effective impervious" or "connected impervious" are not particularly reliable control metrics. The metrics are only superficial assessments of these particular aspects of development. We know that they have a directional relationship with changes in hydrologic processes and stream impacts; but the quantitative relationships are poor due to the large number of additional influencing variables. Given this fact, it would be far better if the Board's MS4 permit were to steer private citizens and local governments, where appropriate, in the direction of less effective impervious surface, without insisting upon a specific, arbitrary numeric applicable to all situations.

¹⁸ US EPA Office of Water, 2000. Low Impact Development, A Literature Review, EPA-841-B-00-005, October.

An actual example of a proposed redevelopment project in Southern California will illustrate the difficulty of implementing a strict 5% EIA mandate for redevelopment and infill projects. One particular project involved widening of a road within a 60-gross-acre right of way. Runoff from the existing roadway was not currently treated for water quality or quantity. The proposed project design included a suite of "best management practices" that included extended detention basins (EDBs), vegetated swales, and cartridge media filtration. All roadway areas (existing and new roadway improvements within the project area and not just the new impervious areas), as well as some off-site drainage, were to be treated by one of these three treatment control BMPs. Priority was given to the treatment control BMP types that would provide for discharge volume reduction. Therefore, EDBs and swales were implemented wherever feasible. Eighty-five percent of the site was amenable to such BMPs. However, right-of-way constraints and safety considerations created limitations such that filter media were the only feasible option for the

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By specifying "one-size-fits-all" requirements that fail to take into account site-specific and circumstantial characteristics, more innovative and potentially more cost-effective solutions may be precluded, and efforts may be spent to meet an arbitrary criterion that will not necessarily achieve the desired outcome. For that reason, a balanced, moderate and realistic consideration of "Erosion Potential" (Ep) may be a more preferable approach than is the EIA limit (directional or otherwise), provided the Ep approach is also a standard, that allows consideration of site and receiving water characteristics, rather than an absolute numeric value.

The Ep standard is intended to consider the integration of site-specific and locally relevant hydrologic and geomorphic considerations into a quantitative criterion. For example, the Ep approach could be used to develop simplified implementation tools in the form of "nomographs," which would provide the necessary information to size infiltration areas to control site runoff appropriately based on local conditions. Using this technique for the Alameda Countywide Clean Water Program, it was estimated that the amount of pervious surface required for this approach to be effective should be 25% of the impervious area draining to it, as a "rule of thumb." This assumed that the pervious surface area would have (i) an equivalent infiltration rate as the catchment area before development, and (ii) 12 inches of total storage depth (surface and porosity). Values would be different for other climate regions and geology, but appropriate values could be developed for different areas using similar steps.

These types of tools developed by permittees under other MS4 permits provide the answer to the question posed above regarding how to best to define "ineffective" impervious area, without imposing an absolute a "one-size-fits-all," county-wide criterion. Emphasis should be given to LID or integrated water resource management strategies as proposed in the 2d Draft Permit's Section 5.E.I.1(e), which means that most projects would result in levels of infiltration or storage/reuse that will contribute to integrated water resources goals. If such an approach were employed, there would be no need for the 5% EIA standard and it should be eliminated. And permittees should be granted flexibility to conduct studies to predict appropriate EP standards for sensitive, unlined channels within their jurisdiction and to develop tools for sizing hydromod controls necessary to protect those channels.

remaining 15% of the project roadway catchments. Although the average annual runoff volumes were predicted to increase, the results of the water quality analysis predicted a decrease in concentrations of all quantitatively modeled pollutants compared to the existing condition. Thus, although the project could not meet a 5% EIA standard, the project – properly mitigated to the extent feasible – was able to reduce directly connected impervious area to 15% (from 100% in the pre-existing condition). Also, modeling shows the project will reduce pollutant loads and concentrations below pre-existing conditions, thereby providing a substantial net benefit to the receiving water – even though it far exceeds a strict 5% EIA standard. Nevertheless, this project fails to comply with the EIA mandate.

c. The application of the EIA limit at smaller scales is inappropriate, unnecessary, and likely to be infeasible in many cases.

Through discussions with the Board's staff, we understand that the intention of their proposed permit conditions is that the 5% EIA standard should apply to all project scales. In other words, this same requirement would apply at a specific plan scale, which might be hundreds or thousands of acres (a true watershed or subwatershed scale), all the way down to the lot level, which could be as little as a 5,000 square feet. The same requirement would apply "greenfield" development, as well as to urban infill and redevelopment projects in which high levels of impervious surfaces may already be present, and also in areas where receiving channels are already hardened, channelized and/or otherwise regionalized.

The imposition of any standardized percentage limitation on EIA, without consideration of project scale or geographic location, is particularly contrary to recognized smart growth concepts. To be smart, project requirements should be related to the development context. Some approaches will work in most settings (at different levels of implementation), while others pose significant challenges in existing urban areas and in the development of new town centers or other compact districts that are constructed in "greenfield" projects.

The imposition of a single maximum EIA limit without consideration of other watershed factors could lead to more "sprawl" as projects will require more land to meet the requirement. As one expert noted:

"From a regional development perspective, incorporating LID should not encourage urban sprawl. A forced over-implementation of infiltration practices could propel the development beyond its initial boundaries and result in more land being consumed. The cumulative impact may be greater than that of traditional approaches if more undeveloped land is used and more roadway infrastructure is created to connect the sprawl development. LID practices should be carefully integrated into all development densities without forcing density reduction. High-density LID represents a formidable challenge." 20

Accordingly, for any application of LID or hydromod principles to make the most sense, proper consideration must be given to a broader context than just the site itself (such as a small lot or project). Instead, proper consideration should be given to the scale of the project and context in which the site or project will fit.

Davis, Allen P., (2005). Green Engineering Principles Promote Low-Impact Development. Environmental Science & Technology, August 15, 338A-344A.

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Luckily, the best way to assure that the greatest contextual input is brought into any project approval is through processes that already exist – pursuant to the California Environmental Quality Act (CEQA).

B. The proposed hydromod and LID measures would be best expressed as goals to be achieved to the extent feasible through the existing public participatory processes required by the California Environmental Quality Act, which requires mitigation of projects' environmental impacts.

We are extremely concerned that an overly-strict application of **either** the 5% EIA limit **or** an "Ep=1 standard" could preclude the most reasonable choices for land use. As presently proposed, the 2d Draft Permit reflects these two inviolable numeric prescripts, which are proposed to apply to all projects. They need to be relaxed in a sensible manner that still protects water quality – as a matter of sound public policy, in deference to local prerogatives regarding land uses, if there is to be any realistic hope that the MS4 permittees and affected citizens can comply with the permit conditions.

Further, the standards that are even more prescriptive than the numerical LID and hydromod absolute limits of 5% EIA and Ep = 1 must be eliminated because they are plainly impossible to achieve. For the best example, consider 2d Draft Permit Part 5, § 5.E.III.3(a) (page 52), which introduces the Ep concept and requirements that follow. The draft language reads:

"The purpose of the hydrologic controls is to minimize changes in postdevelopment hydrologic storm water runoff discharge rates, velocities, and duration. This shall be achieved by <u>maintaining</u> the project's predevelopment storm water run-off flow rates and durations."

As we explained above, it is practically impossible to develop any land subject to a requirement to "maintain" perfectly the project's pre-development storm water flow rates and durations. As a practical matter, change is necessarily change.

The reasonable **minimization** of adverse impacts associated with project changes in storm water flow characteristics is generally achievable and required by CEQA; but "maintaining" the *status quo ante* is inconsistent with any change. Therefore, rather than state an unbending, absolute obligation to "**maintain**[] the project's pre-development storm water run-off flow rates and durations" as quoted above, the objectionable sentence should be changed to read (the bolded text is amendatory):

"This shall be achieved by ... implementing design features to approximate, to the extent reasonably feasible, the project's predevelopment storm water runoff flow rates and durations."

With slight changes such as this, the Board could, for example, establish Ep = 1 as a requirement that would indeed apply in all significant situations – not as an

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inviolable absolute, but as a measure that (i) must be achieved wherever it is reasonably feasible to do so, and (ii) must instead be approached (as must as feasible) whenever achievement is infeasible for any reason. Specifically, the Board could similarly revise the "Interim Hydromodification Control Criteria" for project disturbing land areas of fifty acres or great (shown on page 54 as clause (A)(ii)) to read as follows (the bolded text is amendatory):

"Projects in this category shall develop and implement a Hydromodification Analysis Study (HAS) that demonstrates are ... expected to approximate, to the extent reasonably feasible, the pre-development duration of sediment transporting flows in receiving water. The HAS must ... lead to the incorporation into the project of design features intended to approximate, to the extent reasonably feasible, an Erosion Potential value of 1 ... or any alternative value that can be shown to be reasonably protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces"

A similar small edit could likewise be made to convert the proposed 5% EIA requirement from an inviolable absolute to a requirement that must instead be achieved to the greatest extent reasonably feasible.

Merely by making such changes in the language, the Board could not only advance the purposes of the proposed LID and hydromod proposals, but also could advance the specific provisions that the Board's staff has carefully considered and scrutinized, but which are deservedly objectionable if they were to go forward as absolutes. The solution is to amend the 2d Draft Permit to require the numeric LID/hydromod standards as permit conditions — not as inviolable absolutes, but instead as requirements that must be met "to the extent reasonably feasible as determined in accordance with processes undertake pursuant to" CEQA.

Under CEQA, virtually all projects of any significance are required to undergo environmental impact analysis. Such analysis occurs by addendum, negative declaration, or environmental impact report depending on whether, and the degree to which adverse environmental affects, including water quality impacts, can be mitigated to a level that is less than significant. Such processes have opportunities for public participation and for

The final criteria shown in the 2d Draft Permit (page 55, clause (a)(i)(IV)) could similarly be amended to read:

[&]quot;Stream restoration measures ... that are designed to approximate, to the extent reasonably feasible, the stream and tributary Erosion Potential at 1 or any alternative value that can be shown to be reasonably protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces and drainage stream habitat in natural drainage system tributaries"

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participation by the Board's staff (staff availability permitting, which presumably would be somewhat dependent upon the importance of the project's potential impacts). Under CEQA, the lead agency that is responsible for approving any project must require all feasible mitigation measures to avoid, reduce or minimize significant environmental impacts. And if significant, unmitigated, remaining environmental impacts will likely remain (i.e., after requiring all reasonably feasible mitigation to be incorporated into the project), then the lead agency may approve the project only after preparation of an environmental impact report, public and trustee agency review and comment, with the imposition of all feasible mitigation requirements, and only upon a further finding that the societal benefits of the project outweigh the residual environmental impacts.

The CEQA obligations that are borne by the lead agencies (which are typically the approving city or county and, in the eyes of the Board here, the MS4 permittees) should be sufficient for the Board here to be satisfied that the policy goals prompting the LID and hydromod absolute limits can be advanced as far as is reasonable to push them, while also allowing for permittees to establish infeasibility of satisfying those requirements through operation of the CEQA processes and the proper prerogatives of the local governments. Accordingly, infeasibility exceptions of the type suggested above should be incorporated into the eventual MS4 permit.

C. There should be a more appropriate and comprehensive "grandfathering" provision to prevent the new permit's requirements from applying to either existing land use approvals or pending plans and applications.

As currently proposed, the 2d Draft Permit does not include language sufficient to "grandfather" safely from its proposed requirements (i) all approved projects, (ii) projects for which approvals are pending, and (iii) projects for which applications are immediate.

Without clear language concerning approved projects, questions could arise concerning the ongoing viability of existing land use approvals, including those having completed the arduous CEQA processes – complete with all sorts of public and trustee agency participation. Based upon the 2d Draft Permit's proposed grandfathering language, we trust that the Board has no desire or intention to subject settled approvals to, for example, any eleventh hour need to revisit the project design, and make changes that would negate the approval and send everyone back to square one.

Besides approved projects, however, local governments in Ventura County are at various stages of progress in reviewing, amending, negotiating, conditioning and approving already-submitted permit applications for projects within their respective jurisdictions. Depending upon the jurisdiction, it can typically take eighteen months for such applications to be processed. If the Board were to make immediately applicable changes in MS4 permittee conditions which would affect such applications, tremendous amounts of invested time, effort and money would be wasted.

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Finally, merely given the numbers and frequency with which plans are presented for approval, many private entities are undoubtedly very near to filing applications for approvals. It can be expected that many such plans might not comport with all of the provisions proposed in the 2d Draft Permit or whatever its progeny might eventually look like upon issuance. For those persons as well, the revised MS4 permit that is eventually issued should provide some relief so that great amounts of work, time and money are not wasted.

Accordingly, we recommend that the permit language should include a provision stating that:

"Notwithstanding any provision to the contrary, Part 5 shall not apply to any project for which an application has been filed with the respective jurisdiction within ninety (90) days following the issuance of this Permit. Concerning all such applications, the relevant provisions of the Board's Order No. 00-108, dated July 27, 2000, shall apply in lieu of the provisions of Part 5 herein, at the option of the project applicant or owner."

Importantly, the Board should be comfortable providing such a reasonable "grandfathering" provision because, as noted above, CEQA will apply to pending approvals of significant projects in any event. The CEQA requirement for incorporation of feasible mitigation measures to address all significant environmental impacts will apply to and govern those still-pending project approvals regardless of whether the existing permit (No. 00-108) or its successor applies to them. As a result, the regulatory goals that underpin new MS4 permit/conditions, as eventually imposed, may be met through CEQA instead.

D. The proposed provisions would improperly purport to create liability attributable to non-permittees, and may improperly conflict with the conditions imposed through the state-wide Construction General Permit.

Two new provisions were added to the 2d Draft Permit which would, if adopted, create an inappropriate and illegal enforcement scheme in contravention of the Regional Board's responsibilities under both the Clean Water Act and the Porter-Cologne Act. Specifically 2d Draft Permit, Part 2, page 29, and Part 4 § E.IV.3, page 58, each contains improper provisions that would set up a "presumption" that the permittee has violated the permit (and, hence, violated state and federal law – subject to daily penalties, citizen suit, etc.).

Concerning Part 4, § E.IV.3 as proposed, this provision attempt to shift the burden of proving a violation of the MS4 Permit, away from the Regional Board (to show a violation) and onto a permittee and/or other entities (to show that a violation does not exist). Specifically, it would create a presumptive permit violation if a staff inspector "does not readily identify" post-construction BMPs required pursuant to the property owner's historical subscription to a construction general permit.

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Such an enforcement approach is inconsistent with the regulatory enforcement scheme under both the Clean Water Act and the Porter-Cologne Act. Of course, constitutional considerations arise regarding the presumption of innocence. But even if the provision is ultimately struck down, such a provision could expose a permittee to the threat of daily heavy fines and substantial expenses to the MS4 permittee, merely because a staff inspector doesn't see something on someone else's property. In order to take enforcement action under both the Clean Water Act and Porter-Cologne the Regional Board must show that a permit violation has occurred. It must do more than allege that certain BMPs are not "readily identified" by a less-than-observant inspector, and then simply say, "prove otherwise."

In addition, the 2d Draft Permit vaguely suggests that the Board might impose joint and several liability for MS4 Permit violations against "the Permittee and/or project owner/developer." Part 4, § E.IV.3(a)(1)(A) and (B). If that is what was intended, such a provision is also inappropriate, because the enforcement provisions of the Clean Water Act and the Porter-Cologne Act both require that the regulator prove that a discharger of pollutants has violated the relevant permit provision or statute. Especially in the circumstances suggested by Part 4, § E.IV.3(a), the water quality statutes themselves would not engender strict liability nor joint and several liability for implementation of BMPs approved under a storm water management program, even in the absence of a discharge.

There is no improper discharge of pollutants by project owners/developers required as a prerequisite to enforcement under 2d Draft Permit § E.IV.3 as currently drafted. Project owners and developers are responsible only for selecting, constructing and installing storm water quality BMPs pursuant to a local agency and MS4 permittee's approved storm water management programs. Project owners/developers do not independently generate pollutants or discharges, and do not control conveyance of discharges in the post-development condition. This 2d Draft Permit provision, Part 4 § E.IV.3, purports to create enforcement liability despite compliance with approved storm water quality management programs without any requirement that the owner/developer is a discharger or generates or controls a discharge that violates the Clean Water Act and Porter-Cologne.

Therefore, the proposed Part 4, § E.IV.3 suggestion of liability against a project owner/developer is analogous to trying to hold the users of the sewer system liable for implementation and compliance of a Publicly Owned Treatment Works (POTW) with the POTW's NPDES permit. In the case of POTWs, the upstream discharges might (or might not, depending on type of discharger) have pretreatment requirements, which are separately permitted from the POTW, and once those upstream sources discharge into the POTW, and their discharge meets applicable water quality control requirements they have complied with the Clean Water Act, and will not be held to be in violation of the Clean Water Act if the discharge from the POTW violates the Clean Water Act. See 33 U.S.C. § 1317(a);(b); 33 USC § 1319(f). By way of analogy, once an owner/developer

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has fulfilled its pretreatment requirements by complying with local agency water quality ordinances, regulations and requirements, it has fulfilled its requirements for water quality control, and should not be exposed to enforcement for water quality violations. To create continuing liability is similar to holding those who use the sewer system liable for its treatment performance.

Viewed again from the property owners' side, holding a landowner liable for violating MS4 permit conditions without requiring proof of a discharge of pollutants by the owner/developer and despite compliance with approved local storm water management programs is very different from the other Clean Water Act enforcement cases that hold non-permittees liable for violations of the Act. The cases holding non-permittees liable for violations of the Clean Water Act primarily deal with situations where the non-permittee engaged in some affirmative or reckless action discharging wastes into a navigable waters in violation of the relevant NPDES permit. See, e.g., United States v. Cooper, 173 F.3d 1192 (9th Cir. 1999). Here, landowners/developers (or perhaps a successor landowners who is unaware of the original post-development BMP requirements) would have no actual or constructive knowledge that, for example, implementing BMPs pursuant to an approved storm water management program could be actionable for a failure to comply with MS4 permits.

To assure that the entity with control over discharge and treatment decisions remains liable for compliance with applicable MS4 permit requirements, the Board should eliminate the concept of liability of owners and developers. To assure that Permittees police the approvals that they dole out as compliant with, or deny as noncompliant with, the MS4 Permit, any enforcement action against the developer/owner for not complying with the MS4 conditions as interpreted in the SUSMP approved by the permittees should come in the form of the local agency's enforcement of its water quality, SUSMP, and land use regulations – not in the context of an enforcement action by the Board for violation of the MS4 permit.

The 2d Draft Permit also reflects an improper approach to enforcement in Part 2 page 29). Specifically, Part 2 of the 2d Draft Permit purports to create a presumption that the MEP standard is not being met and that the MS4 permit is violated if a certain number of MAL exceedences occur.²² Further, in Part 2, the proposed provision would create presumptive proof of a discharge violation of discharge limitations to be based solely on exceedences of MALs detected within receiving water mass emissions stations.

First, as discussed above with respect to Part 4, § E.IV.3, this approach is contrary to the enforcement scheme set up by both the Clean Water Act and Porter-Cologne, which typically requires that the Board prove that a permit violation has occurred in order to hold a discharger liable for the considerable monetary civil, and even criminal

²² Many additional technical, legal and policy issues are discussed regarding MALs as affluent limitations in Section III.F. below. This comment focuses on the enforcement scheme rather than the effluent limits.

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penalties authorized by Porter-Cologne and the federal Clean Water Act for NDPES permit violations. 33 U.S.C. § 1319; Cal. Water Code § 13300 et seq.

Second, having the receiving water mass emissions monitoring stations serve as the MAL compliance point is improper because receiving water exceedences can be related to a number of factors. For example:

- There is mixing in the receiving waters of discharges from different sources:
- An MS4 operator cannot be liable for naturally-occurring "contaminants" that enter its system (e.g., 100 million tons of sediment in 1969);
- Property owners who live upstream of MS4 systems enjoy a property right to the discharge of storm water from their properties, and to the natural "contaminants" that are transported therein. See *Locklin v. City of Lafayette*, 7 Cal. 4th 327, 348 (1994). The MS4 operator has no right to obstruct such flows. *Id.*

By allowing receiving water exceedences to establish MS4 permit violations, the Regional Board conveniently, but improperly, relieves itself of all forensic analysis that may be required (to establish whether the receiving water violation is actually related to a particular municipal discharge and to an improper, rather than natural, pollutant level) prior to creating a presumptive violation of the 2d Draft Permit. Issuance of a decree like the one in the 2d Draft Permit, Part 2 (that receiving water characteristics are sufficient to prove discharge violations as a matter of fact and law) is contrary to the enforcement scheme of the Clean Water Act and Porter-Cologne, which — again — requires the enforcement agency to prove that a discharger is in violation in order to bring an enforcement action. 33 U.S.C. § 1319; Headwaters, Inc., v. Talent Irrigation Dist. 243 F.3d 526, 532 (9th Cir. 2001).

Third, as is the case with the other presumptive violation, Part 2 would create the potential for significant civil and criminal penalties, including substantial exposure for mandatory minimum fines, during the period that Permittees are trying to prove that a violation did not occur. Porter-Cologne requires that certain penalties be imposed for certain types of violations, including violations of waste discharge requirements. See, Cal. Water Code § 13350 et. seq. The Clean Water Act also prescribes substantial monetary fines for violations of NPDES permits. 33 U.S.C. § 1319(d). Provisions that purport to create permit violations ostensibly trigger penalties for violations at, and for the period of time that the violation occurs and persists.

Finally, the 2d Draft Permit's provisions would, if adopted, establish a presumptive MS4 permit violation if there are a certain number of essentially "unexcused" MAL exceedences, measurable in the receiving waters. Accordingly, if the permittee were unable to prove the negative, Porter-Cologne and the Clean Water Act

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could operate to require that the Board take action for these violations. Worse, any opportunistic environmental group desirous of some "private attorney general" attorneys' fees could quickly file a citizen law suit against the permittee, because – "well, it says right there in the permit – there's a presumptive violation of federal law" (i.e., a *prima facie* case of violation is made).

The Board should pause to reflect on what it is doing with these presumptive violations. We are talking about **storm water** here. As noted several times above, storm water is naturally highly variable and often uncontrollable. That fact alone should be all the evidence the MS4's might need to rebut a presumption of a permit violation, especially because the Board adheres to water quality standards and objectives that nature routinely violates. But, with these proposals, the 2d Draft Permit would hold all of the permittees in violation simply because, for example, the receiving waters might fail to meet by way of example, an MAL of 19.2 ug/L, which is well below applicable CTR criteria.

Rather than imposing such permit provisions, it would be better if the Board were to develop a greater respect for, and thereupon continue to advance, the constantly-improving, iterative, "best management practices" approach. Doing so would enable the Board to avoid all of this focus on numeric effluents limits – especially those concerning the naturally-occurring "contaminants" like storm water sediment, bacteria, naturally-occurring metals in the soils, etc.

E. The Board should not adopt crippling seasonal grading restrictions for Highly Regulated constructions sites coupled with the "alternative" of utilizing chemical "advanced treatment systems" to achieve an ultra-low turbidity and total suspended solids (TSS) standards. Each alternative is unreasonable. The regulated community should not be stuck on the horns of such an unnecessary dilemma.

If property owners, developers, builders and their customers and employees wish to develop Highly Regulated sites in Ventura County, (i.e., sites where any part of the property being disturbed has a 20% slope, or where the property is within or "adjacent to" a particular creek or water body), then the 2d Draft Permit gives those persons a choice: Either (i) cease all grading during each 6½ month long "rainy season" – extending from October 1st of each year until April 15th of the next; or (ii) collect all of the storm water on the parcel from all storm events, and chemically treat it to remove sediment via an "advanced treatment system" to achieve a turbidity standard of 50 NTU and a total suspended solids (TSS) standard of 100 mg/liter. See 2d Draft Permit, Part 4 § F (pages 61-62).

Neither option is acceptable, and any proper balancing using the California Water Code § 13241 factors would plainly indicate so. Concerning the latter alternative first (meeting the numeric effluent limits – 50 NTU and 100 mg/L TSS), last year, the State Water Resources Control Board received a report from a Blue Ribbon Panel ("BRP") of

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storm water experts convened to investigate the potential of applying numeric effluent limits (NELs) in various permits (the state-wide construction general permit, MS4 permits, etc.). Storm Water Panel Recommendations to the California State Water Resources Control Board: "The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal Industrial and Construction Activities" (June 29, 2006) p. 8, 15. The BRP ultimately opined (i) that NELs generally are not appropriate for MS4 operations, and (2) for construction activities, NELs are technically feasible, but only if chemical advanced treatment system (ATS) is employed to achieve the numeric compliance. The BRP also opined that, in the construction activities context, ATS is problematic and unready for application pending additionally-needed research. Id. at p. 16.

Thus, to the extent that the 2d Draft Permit presents as an "alternative" meeting the numeric effluent limits of 50 NTU and 100 mg/L TSS, the 2d Draft Permit is mandating, as one compliance alternative, the county-wide use of chemical ATS for all Highly Regulated construction sites.

Knowledgeable experts within the construction industry have serious concerns about potential applications of ATS. Although experts will not rule out the possibility that ATS might be the best alternative in some rare circumstances, the proposition of using ATS more generally is not a sound proposition for construction site water quality control, especially not in Southern California. First, as the BRP confirmed, applying chemicals to retained storm water (in order to precipitate out sediments in a controlled manner until "non-exceeding" water can be discharged) is a technical challenge that needs significantly more study. Id. at 16. In particular, we need studies to demonstrate whether ATS works and works safely in "flashy" watersheds like those in Southern California, where large, infrequent storms are more likely. Ibid.

But most importantly, ATS and the numeric limits that are reflected in Part 5, Section F of the 2d Draft Permit are fundamentally inconsistent with nature. When it rains hard in Southern California, the natural areas (i.e., those unaffected by development) certainly do not limit themselves to 50 NTU or 100 mg/L TSS. As we know, 100 million tons of sediment flux flowed into the Santa Barbara Channel in 1969. That was an extraordinary year, but the point is that nature is extremely variable. Therefore, trying to insist that storm water discharges from construction sites must comport to 50 NTU or 100 mg/L TSS is simply inconsistent with the natural variability of the environmental characteristics of storm water. ATS is therefore unnatural in two respects. First, there is the tricky business of properly adding chemical "polymers" to the retained construction site storm water. The chemical polymers are not natural, and there is no natural amount to add. Accordingly, there are concerns about accidents, proper doses, and improper handling and, as a result, ATS pollution. Second, and most importantly, the resulting "cleansed" water is not natural, either. As noted, nature routinely exceeds 50 NTU or 100 mg/L TSS by huge and widely variable degrees.

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Therefore, one need only look to Water Code § 13241(b) to reject ATS as an alternative. Section 13241(b) requires the Board to consider the "environmental characteristics" of the water body or water bodies at issue. One undeniable environmental characteristic of the waters within Ventura County is that they tend to exceed 50 NTU and 100 mg/L TSS greatly during and after any substantial storm. One must wonder, therefore: Why is the Board's staff seemingly so firmly opposed to natural environmental characteristics?²³

Similarly, as noted far above, the "guiding star" of the federal Clean Water Act is the admonition to "restore and maintain" the natural characteristics of the waters. Putting chemical additives in retained storm water in order to achieve entirely unnatural storm water characteristics is simply wrong. It is tantamount to turning one's back on the "guiding star" of the Clean Water Act. Mandating ATS would be aiming regulation in exactly the wrong direction. One could never arrive at a properly "balanced" result that way.

Properly considered, the other Porter-Cologne balancing factors generally point away from ATS as well. Obviously, the ATS approach is extremely expensive. Therefore, economic considerations, which are expressly required by subsection 13241(d) and implicit in subsection (c), should push the Board away from ATS. Equally, obviously, subsection (e), the need for housing – the same result: it should push the Board away from ATS. Even subsection (a), the "past, present and probable future beneficial uses" of the waters lean away from ATS, if the Board were to respect nature appropriately, and conform (belatedly) receiving water beneficial uses and water quality standards more to natural conditions.

The only other alternative presented in Part 5, Section F of the 2d Draft Permit to persons with land appropriate and otherwise approved for legal development, but having the site attributes identified by staff, as worth of Highly Regulated construction sites, is to stop all grading on the affected lands for 6 1/2 months each year, from October 1 to April 15. The Board must know that the grading restriction would be a crushing blow to the impacted industries, landowners, and those who need housing. Therefore, the subsection 13241(d) and (e) factors (economic considerations and the need for housing) should weigh conclusively against the proposed grading ban.²⁴

²³ Considering another "environmental characteristic," it is relevant that the proposed 6½ month "wet season" for the grading ban is relatively devoid of natural precipitation. An analysis of the historical rainfall records within Ventura County shows that, on average, there are only between 23 to 28 days within the 6½ month (approximately 195 day) "wet season" on which any amount of rain typically occurs (13% of the time during the "wet season" – or slightly less than one day per week).

As just one example of the costs of a grading ban, using current values for entitled land in Ventura County of \$500,000 to \$1,000,000 per acre, the carrying-cost alone for a project proponent ranges between roughly \$62,500 and \$125,000 per acre over a six month period. Even

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Moreover, such a ban is unnecessary given that there is a far more sensible third alternative exists. The third alternative is to require enhanced construction BMP implementation by any developer that needs or wishes to grade a Highly Regulated construction site during the 6 1/2 months out of each year. Specifically, the permit could include alternative language that would require for the types of sites implicated by 2d Draft Permit Part 4, Section F.1.:

- Enhanced inspection requirements;
- Selection from an enhanced suite of sediment and erosion control BMPs; and
- Special limitations on the amount of area left exposed and un-stabilized for an extended period of time during season.

Dr. Mark Grey has already provided to the Board's staff language spelling out this third alternative. We respectfully urge the Board to consider, revise (as the Board deems necessary and appropriate), and adopt such a third option.

F. The proposed establishment of "numeric effluent limits," which are disguised in name in the 2d Draft Permit as "municipal action levels," is inappropriate under as a policy matter and as a matter of law (including, if the Board were to try to feign a federal mandate) federal law.

1. The proposed NELs and MALs are inappropriate as a matter of water quality policy.

If this comment letter were to have a theme by now, it would be two-fold. First, storm water characteristics are naturally very highly variable. (One hundred million tons of sediment flux ... Santa Barbara Channel ... winter ... 1969.) Second, the Board should seek the most appropriately **balanced** course of regulatory action in light of the storm water challenges, using the prescribed balancing factors. Given the two-fold theme of this letter, the reader can guess how we feel about onerous municipal action levels and, even worse, numeric effluent limits.

more crushing would be the displacement of jobs and the costs of idling extremely expensive large construction equipment (coming at a time when the California Air Resources Board is otherwise requiring tremendously expensive retooling and replacement). Any significant seasonal grading restrictions would likely be the departure of many such companies, and it is incumbent not only under state, but also under federal law alone on the Board to commission an actual study of the potential economic affects of the grading ban and ATS alternative on the Ventura construction industry prior to adoption of these requirements.

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Concerning "municipal action levels," which are typically defined as numeric comparisons meant to spur action without implying a permit violation, we oppose them if they are to be used for any purposes other than to spur forensic and evaluative studies within the context of an iterative, "best management practices" approach. Concerning numeric effluent limits (which the 2d Draft Permit would impose under the misnomer of "municipal action limits"), we believe that their place is more properly in the context of anthropogenically generated discharges of pollutants fromindustrial and POTW point sources; and we believe that they have no appropriate place in the context of extremely variable storm water activity. Moreover, we are confident that the bulk of the law – both federal and state – supports our position, as explained below.

Basically, at least concerning sediment loads (TSS) and turbidity (which are the two measures most likely implicated in construction), we believe that any appropriate amount of attention to California Water Code § 13241(b) would preclude the adoption of numeric effluent limits for storm water. That particular balancing factor specifically instructs the Board to consider "the environmental characteristics of the water body at issue, including the quality of water available thereto." When one undertakes any meaningful consideration of the factor, one must soon conclude that the quality of water that is available to the MS4 facilities in Ventura County is **extremely variable** in its nature, especially concerning its turbidity and sediment transport characteristics. And because of this extreme variability, the Board's staff is unable to produce any numeric effluent limits that both (i) have any meaningful statistical validity, and (ii) actually relate specifically to environmental characteristics of Ventura County.

Therefore, we are left wondering whether the numeric effluent limits are attractive to some for some other reasons: perhaps merely because they are simple and easy to test, easy to show that they have been violated, and therefore easy to enforce, easy to penalize, and easy to sue upon. We trust that the Board will conclude that reasons such as those are not good reasons to draw random lines that the MS4 (and persons building homes and businesses) cannot help but cross over, thereby triggering liability under state and federal laws.

As was noted early above, there is no reasonably helpful numeric limit for storm water quality (at least concerning TSS and turbidity) that nature will not eventually violate – given enough time. Consequently, there is no gross numeric effluent limit that makes any real sense for these constituents. The limits proposed by staff to date, and those proposed by various environmental groups, make no sense whatsoever.

For example, at the September 20, 2007 public workshop concerning the 2d Draft Permit, a representative from Heal the Bay proposed that performance based effluent limitations, based on the 50th percentile performance values for treatment control Best Management Practices (BMPs) contained in the EPA/ASCE International BMP Database, should be included in the permit in place of the municipal action levels (MALs) proposed by the Board's staff. The International Stormwater BMP Database (ASCE/EPA, 2003) is

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a robust, peer reviewed database that contains a wide range of treatment control BMP effectiveness studies that are reflective of diverse land uses.

The proposal is unreasonable for two reasons. First, the required use of treatment control BMPs in the 2d Draft Permit is limited to new development and redevelopment projects. Runoff from existing developed areas served by the MS4 does not typically receive treatment in treatment control BMPs unless those areas are voluntarily "retrofitted" by the Permittee, because there is no requirement in the current or revised draft MS4 permit that mandates retrofit of already developed areas, undeveloped open space or farmland. It is therefore inappropriate to include a treatment control BMP performance-based effluent limitation in the permit, because much of the MS4 permit area is already developed, or may be undeveloped open space or farmland, and therefore does not receive treatment in a treatment control BMP. Moreover, the runoff from such land uses (which differ in their respective characteristics) are often beyond the control of the MS4 operator, and indeed may contain constituent that naturally exceed the 50th percentile value from the recommended BMP effluent database, but natural constituent levels would not constitute "pollution" as defined by the Clean Water Act.

Second, in any event, it would inappropriate to use a 50th percentile (the median) value to establish even a BMP performance-based effluent criterion. The 50th percentile is the value below which 50 percent of the observations in the database are found. Therefore, even assuming that the international database was magically representative of Ventura County, ²⁵ 50 percent of the observations would be out of compliance with an effluent limitation derived using the 50th percentile value from the database. Using the median value implies that all monitored sites must be at or above the "central tendency" of the available data, which would not be representative of poorly performing BMPs even if we assumed all sites tributary to MS4s were treated by BMPs..

The State's Blue Ribbon Panel found that numerical effluent limits were not feasible for existing urban areas in the Municipal NPDES permit program pp 8-9. Thus, they should not be considered for inclusion in the Ventura County MS4 permit, especially numeric effluent limits based as suggested by environmental groups, on the central tendency of treatment control BMP performance data contained in the EPA/ASCE International BMP Database.

2. NELs and MALs are inappropriate as a matter of law.

There seems to be no way to justify referring to an international database of averages concerning water quality when the issue is highly variable storm water in Ventura County. California Water Code § 13241 specifically commands consideration of the "environmental characteristics of the water body at issue, including the quality of water available thereto." Obviously, the California Legislature had something in mind other than looking at an international database for a worldwide median value. For the same reason, nation averages make no sense in this context either, especially when considering the natural attributes of Ventura County's' storm water. They have nothing whatsoever to do with what storm water does in Florida.

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Apart from the many good policy, practical, technical and scientific reasons for objecting to the proposed use of numeric effluent limits reflected in the 2d Draft Permit, there are a few legal issues to reject MALs and NELs as well. Those are discussed next.

The 2d Draft Permit establishes numeric effluent limits identified within the permit as Municipal Action Levels (MALs), but implemented within the permit as numeric effluent limits. See 2d Draft Permit Finding F.10. (page 22); Discharge Prohibitions, Part 2 p. 29; and Attachment C. Pursuant to the 2d Draft Permit, discharges of storm water from MS4s to waters of the U.S. that exceed MALs are prohibited – rather than spurring some action short of an enforceable violation to improve water quality. 2d Draft Permit, Discharge Prohibitions, Part 2 § 1 p. 29. Pursuant to these proposed permit terms, if monitoring data for any permittee were to show discharges are characterized by a running average of twenty percent or greater exceedences of MALs, the permittee is obligated to implement all necessary controls and measures to eliminate the "violation of the municipal storm water discharge limitation."

Although the 2d Draft Permit does not set forth the type of numeric limits being imposed as MALs (i.e., whether water quality based effluent limits, or "WQBELs," or technology based effluent limits, or "TBELs"), the Board's staff stated in their presentation at the Board workshop held on September 20, 2007 that MALs are being proposed in the Draft Permit as TBELS. Discussion and presentation of Xavier Swamikannu, Los Angeles Regional Water Quality Control Board Public Workshop On Proposed Changes To The Waste Discharge Requirements for Municipal Separate Storm Sewer System Discharges Within the Ventura County Watershed Protection District, County of Ventura and the Incorporated Cities therein (NDPES No. CAS00-4002), Public Notice No. 07-048, September 20, 2007.

Similarly, the 2d Draft Permit establishes numeric effluent limits for all construction sites with slopes or "environmentally sensitive areas" that conduct grading during the period from October 1 to April 15. Draft Permit, Part 4 § F. 1(c) p. 62. The numeric limits for such construction sites are 100 mg/l for Total Suspended Solids, and 50 NTU for Turbidity. While neither the Draft Permit nor the Regional Board staff presentations at the September 20, 2007 Workshop identify the type of numeric limits imposed on Ventura County construction sites, the construction site limits similarly have been represented in stakeholder meetings as TBELs. Pers. comment Xavier Swamikannu.

We believe that Mr. Swamikannu's statements indicating that the proposed NELs would be TBELs is incorrect. In demonstrating the point, we will also demonstrate that in any event federal law does not compel the Board to adopt the NELs proposed in the 2d Draft Permit regardless of the distinction between WQBELs and TBELs. Further, pursuant to the *Burbank* opinion, the Board may adopt numeric effluent limits only pursuant to a faithful reconciliation of the Porter-Cologne § 13241 balancing factors.

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Finally, we explain why both federal and state law factors largely preclude any adoption of the proposed numeric effluent limits.

As noted above, in 1987, Congress amended the Clean Water Act to include specific requirements for both industrial and municipal storm water discharges. The industrial storm water permit provisions of 33 U.S.C. § 1342(p)(3)(A) require industrial storm water discharges to meet all applicable provisions of 33 USC § 1311, which is the statutory section that authorizes and requires both technology based and water-quality based numeric effluent limits in industrial storm water discharge permits. However, the Clean Water Act provision dealing with MS4 discharges, 33 U.S.C. § 1342(p)(3)(B), contains no reference to 33 USC § 1311. In fact, nowhere in the language of 33 U.S.C.§ 1342(p)(3)(B) is there a reference or requirement to incorporate technology-based or water quality based numeric effluent limits into municipal storm water discharge permits. Instead, the statutory scheme of the Clean Water Act and applicable federal guidance clearly indicate a strong preference for a BMP-based approach to the regulation of municipal storm water discharges.

For example, Congress clearly set up a distinction between, on the one hand, industrial municipal discharges, which are expressly and specifically required to include technology-based and water quality based numeric effluent limits via 33 U.S.C. § 1311, and, on the other hand, municipal storm water discharges, which are not. The fact that Congress chose not to include a reference to 33 U.S.C. § 1311 in the provisions dealing with municipal storm water discharges indicates Congressional intent to regulate municipal discharges in a different manner than it regulates industrial storm water discharges -- namely an intent *not* to require municipal storm water discharges to achieve strict numeric effluent limits or water quality standards. Numerous cases support this proposition, without deviation. *E.g.*, *Defenders of Wildlife v. Browner*, 191 F.3d 1159, 1165 (9th Cir. 1999).²⁶

Because the Clean Water Act does not mandate adoption of numeric TBELS or numeric WQBELs is used herein to refer to *numeric* water quality based effluent limits), the question here becomes whether federal law suggests or invites the TBELs that are currently proposed in the 2d Draft Permit. All indications are that federal law does not.

TBELs are numeric limits based upon best available, or, in the case of storm water, the best practicable technology available for the reduction of water pollution, and

²⁶ In the absence of any federal mandate to adopt numeric effluents, and given that the Clean Water Act expressly allows for incorporation of a BMP-based approach into MS4 Permits (rather than adoption of numeric effluent limits), continued reliance by the Board on an iterative BMP-based approach would not constitute a "dilution of the requirements set in the Clean Water Act" in derogation of the federal law.

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they are authorized by 33 U.S.C. §1311(b)(1),²⁷ the same Clean Water Act section that is conspicuously disassociated from municipal storm water permit requirements. Further, federal regulations governing inclusion of TBELs in NPDES permits set forth at 40 C.F.R. § 122.44 specifically state that:

"NPDES permit[s] shall include conditions meeting the following requirements when applicable:

(a)(1) Technology based effluent limitations and standards promulgated under Section 301 of the CWA, or new source performance standards promulgated under section 306 of CWA, on a case-by –case basis under section 402(a)(1) of CWA, or a combination of the three, in accordance with § 125.3 of this chapter." (emphasis added).

Despite an express and specific reference to setting TBELs to comply with standards in section 402(a)(1) of the Clean Water Act, the regulation governing inclusion of TBELs in NPDES permits does *not* reference inclusion of TBELS in NPDES permits based on section 402(p)(3) of the Clean Water Act. Instead, the only section of the regulation authorizing adoption of numeric limits states – specifically concerning MS4s – that NPDES permits should include:

- "(k) Best management practices to control or abate the discharge of pollutants when:
- (2) Authorized under section 402(p) of the CWQ for the control of storm water discharges." 40 C.F.R. § 122.44(k).

In addition to the absence of reference to 33 U.S.C 1311(b) in the statute and regulations governing MS4 permits, the structure and text of 33 U.S.C. § 1342(p)(3)(B)(iii), and federal regulatory guidance and case law interpreting that section, indicate that adoption of TBELs in MS4 permits is not expressly authorized and has not been contemplated to date.

Specifically, Clean Water Act Section 1342(p)(3)(B)(iii) states:

- "(3)(B) Permits for discharges from municipal storm sewers—
 - (iii) shall require

[a] controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineer methods, and

[b] such other provisions as the Administrator or the State determines appropriate."

²⁷ Communities for a Better Environment v. State Water Resources Control Board et al., 109 Cal. App 4^{th} 1089, 1093 (1^{st} Dist. 2003).

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EPA regulatory guidance issued in conjunction with adoption of the Phase II Regulations and related case law both indicate that, when issuing permits under § 402(p)(3)(B)(iii), the NPDES permitting authority should consider the permit conditions in "steps" or "components." 64 Fed. Reg. 68722 at 68753-68754; Communities for a Better Environment v. State Water Resources Control Board et al., 109 Cal. App 4th 1089, 1093 (1st Dist. 2003). The first step or component is to consider appropriate technology based permit limitations to achieve the technology-based standards set by the statute. 64 Fed. Reg. 68722 at 68753-68754. The second step or component is to determine if more stringent permit requirements are necessary to protect water quality. Id. With respect to the second step, EPA reasons that if compliance with BMPs, control techniques and systems, design and engineering methods is inadequate, and there is still water quality impairments associated with discharges from the MS4, then Clean Water Act 402(p)(3)(B) authorizes (i.e., permits) the permitting authority to implement a second component or step in the NDPES permit to protect receiving waters pursuant to the portion of the governing statute stating that MS4 permits shall require "such other provisions as the Administrator or the State determines appropriate." Id. See also Communities for a Better Environment at 1093. In other words, WQBELs may be imposed pursuant to the residual discretionary powers.

Similarly, the adopted Phase II Regulations indicate that municipal storm water discharges are required to comply first with management measures, not TBELs, designed to achieve pollutant reductions to the MEP, and that any more stringent limitations in MS4 permits should be added as WQBELs to protect water quality:

"You must comply with any more stringent effluent limitations in your permit, including permit requirements that modify, or are in addition to, the minimum control measures [BMPs], based on an approved total maximum daily load (TMDL) or equivalent analysis. The permitting authority **may** include such more stringent limitations based on a TMDL or equivalent analysis that determines such limitations are needed **to protect water quality**." 40 C.F.R 124.34(e)(1).

We are not aware of any EPA guidance or regulations that authorize or even consider setting numeric limits as TBELS to define or translate the MEP standard. All available guidance and regulations specifically and expressly address setting numeric limits only as WQBELs. Notably, all of the federal cases that we located which have addressed the issue of numeric limits in storm water permits (of which there are few) have done so in the context of consideration of permissibility of WQBELs, not TBELs. See, e.g., Minnesota Center for Environmental Advocacy v. Minnesota Pollution Control Agency, 660 N.W.2d 427; Mississippi River Revival, Inc. v. City of St. Paul, 2002 WL 31767798 (D.Minn. 2002).

Therefore, neither the applicable provisions of the Clean Water Act, nor the regulations adopted thereunder, nor EPA guidance issued thereunder, nor case law interpreting the Clean Water Act expressly authorizes or contemplates the adoption of

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TBELs to define MEP. Instead, any such adoption would be a discretionary act comprising the adoption of WQBELs.²⁸

But even if one were to conclude that the Board is authorized to properly include MALs and NELs as TBELs in the 2d Draft Permit, there is still no avoiding the conclusion that the imposition of MALs and NELs, as TBELs or otherwise, is a discretionary act. The federal and state courts have consistently recognized that both clauses of Clean Water Act § 402(p)(3)(B)(iii) instill discretion in the regulator. Therefore, because the Board would in any event be exercising its discretion, when it proposes MALs and NELs as TBELs, it must do so pursuant to a proper exercise of its discretion. Further, as discussed at length earlier, the Board may not impose discretionary MS4 permit effluent limitations, whether they are TBELs or narrative limitations, except pursuant to the Porter-Cologne Act, per the *Burbank* opinion.

This brings us to the question of whether MALs and NELs are a proper exercise of the Board's discretion under state and federal law. Like Porter-Cologne, federal law mandates that regulators must consider and balance proposed technology-based effluent limitations in light of several factors to determine whether the proposed limitations are a reasonable and appropriate exercise of discretion. Interestingly, the federal factors to be considered are very similar to the factors set forth in California Water Code § 13241, and include:

- what is practicable, rather than all that is possible;
- conditions of receiving waters;
- specific local concerns;

²⁸ If we were to assume, for argument, that the Board could adopt the NELs as TBELs, then it must do so consistently with the provisions of federal law governing the adoption of TBELs. In the Clean Water Act, Congress specified the process that regulators must follow and the factors they must use when issuing industry-wide pollutant control measures or "[e]ffluent limitation guidelines." 33 U.S.C. § 1314(b). That process includes numerous steps that plainly are not apparently concerning the Ventura County MS4, including, (i) making findings concerning the characteristics of the discharged pollutants and the degree of pollution reduction attainable through use of best management practices, and (ii) identifying control measures and practices available to eliminate the discharge of pollutants from categories and classes of point sources, taking into account the cost of achieving such elimination of the discharge of pollutants (33 U.S.C.; § 1314(b)(3)). Moreover by analogy to setting TBELS for other technology-based standard (BAT, BCT, or BPT), the Board would need to do still more, and would need to weigh factors including: the relationship between the costs of attaining a reduction in effluents and the effluent reduction benefits derived; the age of treatment equipment and facilities involved; the nature of the treatment process employed; the engineering aspects of the application of various types of control techniques; the process changes required to implement the control measures selected; and any non-water quality environmental impacts, including energy requirements. 33 U.S.C. § 1314(b)(4)(B); 40 C.F.R. § 125.3(c); see also, 33 U.S.C. § 1314(b)(2)(B) for the BAT standard. See also The Clean Water Act Handbook 24 (Mark A. Ryan, ed. 2003) (listing factors required to assure the legality of TBELs).

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- available control technologies;
- local climate;
- beneficial uses of receiving waters;
- local hydrology and geology; and
- cost of implementing proposed effluent limitations and controls.

EPA Phase II Stormwater Regulations, 64 CFR at 68722; Building Industry Assn. v. State Water Resources Control Board, 124 Cal. App. 4th at 889. See also, Conservation Law Foundation and Oceana v. Donald L. Evans and Fisheries Survival Fund, 360 F.3d 21 (Feb. 26 2004). How would the MALs and NELs fare under these federal factors? The answer, as described above in considering the application of these same factors in the context of California Water Code § 13241 to proposed MS4 permit requirements is: not well. Since California Water Code Section 13241 factors encompass all of those federal factors above, and MALs and NELs are inappropriate under Section 13241 factors, these effluent limitations are similarly inappropriate solely under federal law.

Therefore, the Regional Board should follow the guidance provided by EPA, which, after all, is the federal agency ultimately charged with implementation and enforcement of the federal Clean Water Act, and should regulate municipal storm water discharges by requiring implementation of management practices, control techniques and system, design and engineering methods that control pollutants to the maximum extent practicable. The Board should forgo adopting MALs and NELs as proposed in the Draft Permit.

The Board has provided no evidence that it is technically feasible for Ventura MS4 systems to comply with MALs derived from the nationwide receiving water monitoring results database, particularly where that database contains numeric receiving water concentrations drawn from geographic areas with very different mixes of land uses (new development, redevelopment, existing urban, farmland and open space), very different BMP requirements, very different precipitation patterns, and very different storm water and receiving water background constituent loads and concentrations. It is also clear from this letter, our testimony, and the comments and testimony of permittees and stakeholders that MALs and NELs do not enjoy public acceptance. Further, the testimony and comments of permittees indicate that the effluent limitations of the 2d Draft MS4 Permit cannot be satisfied based on the current of municipalities to finance the storm water program. Therefore, consideration of proposed MS4 permit conditions, including MALs and NELs in light of these federal factors also results in the conclusion that, as proposed, the limitations are inappropriate.

²⁹ Federal law also requires consideration of effectiveness of proposed effluent limitations and controls in light of:

[•] technical feasibility of implementing effluent limitations and controls;

public acceptance of proposed effluent limitations and controls required to comply with them; and

current ability of municipalities to finance the storm water program.

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G. The proposal to require immediate compliance with various numerical TMDLs established for the Ventura County waters is both unreasonable and at variance with the implementation schedules previously established for many of the same TMDLs.

Quickly to the point: The 2d Draft Permit provisions concerning TMDLs are written in such a way as to effectively accelerate the implementation of TMDLs well in advance of the implementation schedules that are already in place. We cannot imagine why the Board would want to do that. But, if the Board does, the Board should know that – obviously – that would be yet another discretionary act that the Board would need to first be addressed through consideration and reconciliation of the Porter-Cologne § 13241 balancing factors. We trust that the Board and staff will want to correct that proposal.

Conclusion

We thank the Board, staff and legal counsel for their consideration of these lengthy comments. They reflect our careful work and thought; and we hope that they will be well received.

Please add to these comments to the so-called "red-lined" version of the 2d Draft Permit which we earlier provided to your office. The comments reflected in the proposed edits to that red-lined draft largely follow (or perhaps led) the comments stated herein, and they should be made part of the record for this permit.

The comments herein are additive to the comment letter and chart that we delivered in connection with the initial draft of the permit earlier in the year. Virtually all of our concerns stated therein apply to the 2d Draft Permit, particularly to the extent that objectionable proposals were retained from the first draft to the second. The fact that we did not herein repeat all of the legal, technical and policy positions set forth earlier is not meant to indicate any withdrawal of concerns. To the contrary, those earlier comments and the red-lined edits of the 2d Draft Permit should all be made part of the growing record concerning the eventual, pending permit revision at issue.

Lastly, we respectfully request the Board to instruct its staff to make available and circumscribe the record scientific evidence on which the Board will make its ultimate decision. We were, in fact, concerned to notice that the 2d Draft Permit strangely omitted some citations to reference materials which had been cited in the initial draft. We hope and trust that the Board and staff will share the body of evidence on which the Board will decide the matter, so that there can be a full and fair exchange of evidence. We therefore look forward to working with the Board's staff to help create for the Board the best possible record on which to make its eventual decision.

Thus, we look forward to further cooperation with the Board, its staff, and its counsel.

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Sincerely,

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